

# ATHLETIC JOURNAL

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## The Offensive Play in the All-Star Globe Trotters Basketball Game

Arthur C. Lonborg

## Winter Sports Activities

J. Fred Gohl

Victor Heyliger

Harold Hillman

Bruce Guild

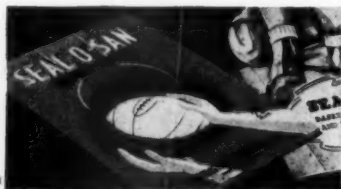
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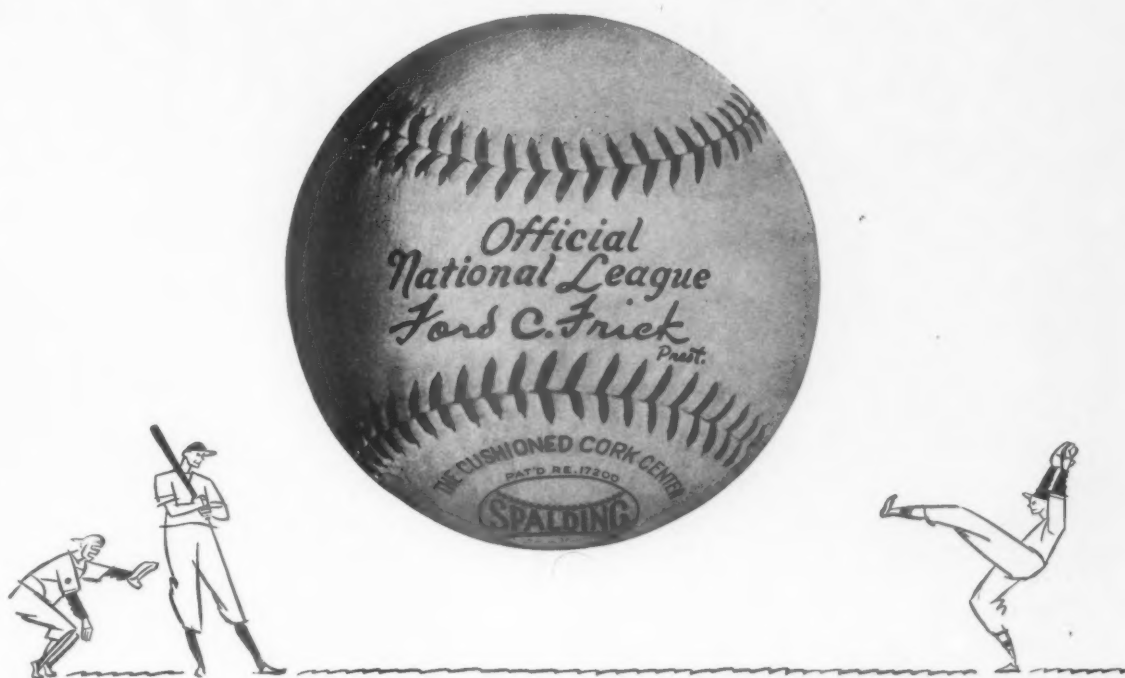
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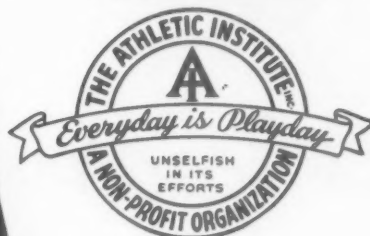
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## Offensive Play in the All-Stars

# Globe Trotters Basketball Game

By Arthur C. Lonborg

Basketball Coach, Northwestern University

THE offense in the All-Stars versus Globe Trotters game was pretty much built around the pivot play, the All-Stars using only one man on the pivot while the Globe Trotters used two.

The offense of the All-Stars on one side of the court was the inside screen, (Diagram 1) while on the other side the outside or guard-around play was used, (Diagram 2). This offense was effective as Carpenter, the All-Stars' center, was an excellent pivot-player and could shoot very well with either hand. Hapac was accustomed to the inside screen play and was a fine right-handed shot. The guard on this play did not drive under the basket on all plays which gave Carpenter a chance to fake a pass to Hapac then turn and shoot a left-handed shot. This also gave Hapac an excellent chance to drive in front of Carpenter for a return pass and to shoot a right-handed shot which is his specialty.

The play on the other side was set up to take advantage of Ralph Vaughn's excellent left hand as well as to give the All-Stars a front-line screen so that the guards could drive into the basket. This play was very strong and scored the final and winning basket for the All-Stars. The Globe-Trotters were concentrating on stopping Vaughn and did not shift in time on the screen which gave Szukala a fine shot and the final score of the game.

The Globe Trotters offense was built around the double pivot although the two pivot men did not screen for each other. Pivot man 1 was used as a feeder and rebound man while pivot man 2 was a pick-off and follow-up man. As indicated in Diagram 3 pivot man 2 was farther from

the basket than in the other pivot play. He was therefore in better position to screen for the men breaking into the basket. The play shown in Diagram 3 was used to good advantage by the Globe Trotters. The ball was passed to the center 1 as player 3 broke around center 2, to take the pass driving into the basket. As indicated, the break was optional. The position of the defensive man guarding 3 being the determining factor as to which side of the center he would break. This play gave 3 a good hard drive into the basket and made the All-Stars change very fast on the screen.

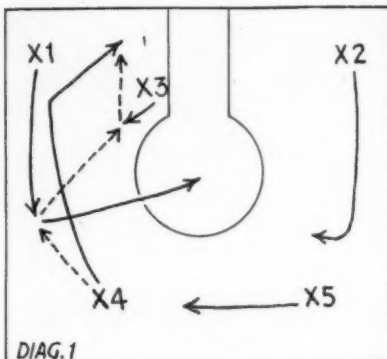
As the game progressed, the Globe Trotters discarded the offense as shown in Diagram 3 for a milling offense, still using the double pivot. The two pivot men were used almost entirely as rebound players in this offense. The mill was used by the Globe Trotters to drive the All-Stars' front line of defense back and give Boswell or Pressley set shots. They were both fine shots when given enough time to get set. Most of the Trotters' scores were made in this manner. After milling around in front of the defense either Boswell or Pressley would take a set shot with the two pivot men following up hard. Pressley and Boswell scored eleven baskets although the All-Stars were warned to guard both very closely.

Much more important than the plays used by the two teams was the excellent fundamental play; the passing, dribbling and shooting were exceptional for such an early season game. Very few mistakes were made by either team and possession of the ball was stressed by both teams.

Neither team was willing to relinquish possession until a good shot was to be had. The ball-handling of both teams was extraordinary and few bad passes were made during the game. To have an All-Star team of players who had worked together only two weeks play so well and make so few mistakes was more than any one expected.

In a study of the two teams play, this one difference stood out—the All-Stars were almost entirely one-handed shooters; Vaughn, Hapac, Carpenter and Szukala especially were fine one-hand shots. Vaughn and Carpenter had good lefts while Hapac and Szukala used their right hands to good advantage. The All-Stars shot while on the move; the Globe Trotters were set shooters using two hands. Pressley and Boswell were always dangerous if given time to get set. Most of the shots taken by the Trotters were set shots although the pivot men did take a few one-hand shots. However, they were not as proficient as the All-Stars with one hand.

The use of the fast break was held down due to the defense of the two teams. The opportunity to fast-break did not present itself very often and for that reason the quick break was not used by either team to any great extent. The All-Stars used a fast break for a couple of baskets and were prepared to break fast whenever the opportunity presented itself. The three-man straight-line fast break was used with one of the guards the third man down. When Ellis, Callahan, Jaworski, Huffman and Berretta were in the game for the All-Stars the fast break was more in evidence as all were quick-break players in college.



DIAG. 1



DIAG. 2

#### Inside Screen

##### Illustrations 1-8, Diagram 1

Illustration 1—Guard 4 passes to forward 1, breaking out to meet the pass.

Illustration 2—Guard 4 releases the ball and starts to follow the pass.

Illustration 3—The guard breaks inside the forward 1 who is about to pass the ball to the center 2.

Illustration 4—The center 3 catches the pass from the forward. Guard 4 breaks for the basket.

Illustration 5 shows the pass from center 3 to the guard 4 who has run past the defensive guard.

Illustration 6—Guard 4 goes up for a short shot. The center is in position to follow up the shot, if missed.

#### Outside Play

##### Illustrations 7-16, Diagram 2

Illustration 7—Guard 5 passes the ball to the forward 2 who comes out fast to meet the pass.

Illustration 8—Forward 2 is getting set to pass to the center.

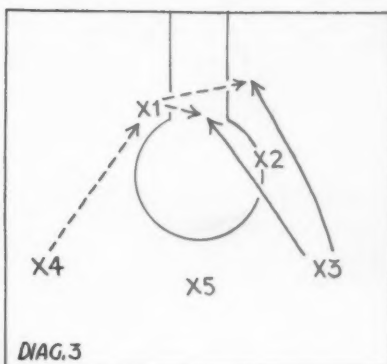
Illustration 9—Forward 2 has just passed to the center 3 who also comes out to meet the ball. Guard 5 is starting his break for the basket.

Illustration 10—Forward 2 is following his pass and is running in such a way as to screen for guard 5.

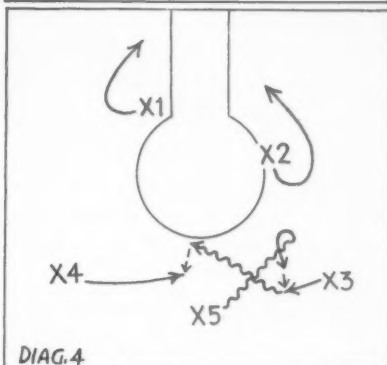
Illustration 11 shows guard 5 breaking into the clear, about to receive the ball from the center.

Illustration 12—Guard 5 has received





DIAG. 3



DIAG. 4

the ball from center and is about to take off for a short shot. Note the center has turned to follow the shot.

### Pick-Off Play

#### Illustrations 13-18, Diagram 3

Illustration 13 shows guard 4 passing the ball to center 1. The forward 3 starts to break for the basket.

Illustration 14—Center 1 has received the pass from guard 4. Forward 3 has run in such a way that the defensive man has been screened off.

Illustration 15 shows the forward 3 breaking into the clear, although the defensive man guarding the center 2 is changing to cover him.

Illustration 16—The center 1 has just passed to the forward 3 who is driving under the basket for a shot. The center 2 is turning to get into position to follow the shot.

Illustration 17 shows the forward 3 about to shoot. Centers 1 and 2 are getting into a follow-up position.

Illustration 18 shows the forward 3 making a left-handed shot after driving under the basket.

### 3-Man Mill Play

#### Illustrations 19-24, Diagram 4

Illustration 19—Guard 5 is dribbling across the court, the start of the mill.

Illustration 20 shows the forward 5 pivoting and starting to pass the ball to forward 3.

(Continued on page 42)







## Speed Skating in a Winter Sports Carnival

By J. Fred Gohl

Director of Peirce Playground, Chicago

**S**KATING for pleasure has its place in all winter sports and ice carnivals but the thrill for spectators and competitors comes in speed skating. What young boy or girl does not like to show his or her skill in speeding gracefully around an oval skating track? They all enjoy entering events for sport at ice carnivals. The challenge of speeding is always aroused in skaters' minds when open opportunities to enjoy fast skating are before them. Speed skating races attract large crowds because of the spirit of competition. All races and events of any skating meet should be adapted for the school or community interested in promoting them. Many leaders in civic organizations enjoy assisting in the promotion of skating meets as well as in helping officiate them.

The younger skaters' events should come first. If one long and one short race is scheduled for each age group, the short race should be run first. It is better to finish all preliminary races before starting any finals, thus allowing plenty of rest between the two. Qualifying races in the 220, 440 and 880 may be run at half these distances if the same skaters are in several events. This is especially true in girls' races. It does not apply to the mile event. Here we have more skilled skaters who enjoy the grind of a mile race. Relay races are most successful when run as concluding events. Novel races work in the schedule best after the qualifying races or just before the relays.

Every age group should be considered in making up the program of events. In making such a program the proper distance for each age group must be kept in mind. Equality in skating ability is not as important to the skaters as the age and size of their competitors. Every age has its skaters who excel in nearly every race. A director should never make the mistake of placing them in a higher age group. Older, inexperienced skaters will be easily discouraged when defeated by younger skaters. They will accept defeat by their own age more readily. The same is true of (Continued on page 45)

## Present Status and Growth of College and High School Hockey

By Victor Heyliger

Hockey Coach, University of Illinois

**D**URING the last decade ice hockey interest has developed tremendously in the United States, particularly from a playing standpoint. Since ice hockey was first introduced in this country from Canada, it has become a favorite sport with our winter-sport enthusiasts. Today it is probably the fastest growing sport in the nation. However, it has been only in recent years that the American boy has had a chance to play the game and prove himself a capable performer. Up until this time the American youth was merely a spectator of the professional games in which only Canadian players participated.

Now that rinks are being built practically all over the country, the high school and college students have begun to take actual part in the participation of the game. True, the performance of the American hockey player at present is not up to the standard of that of the Canadian player. Each year, however, our high school and college players are becoming more adept in the fundamentals of hockey.

In different sections of the country where natural conditions do not exist for the playing of hockey, artificial rinks are being built so that the popular game may be developed. During the past few years rinks have been built in Toledo, Ohio; Charleston and Huntington, West Virginia; Buffalo, New York; Indianapolis, Indiana; Omaha, Nebraska; Miami, Florida; Houston, Texas; San Diego, Bakersfield and Santa Rosa, California, as well as in other cities. Other rinks are to be built in the near future in Milwaukee, Wisconsin; Columbus and Cincinnati, Ohio; Madison, Wisconsin, and other cities on the West coast. Since the actual cost of rinks is becoming less each year, eventually every large city will be sponsoring a skating rink. As a result, a greater number of our boys will be taking up the game.

Hockey is a bruising, rough and tumble game involving plenty of body contact. Body contact is attractive to the American youth, as has been proved (Continued on page 46)





## Downhill Ski-Racing as Developed in the United States

By Harold Hillman

Director of Woodstock, Vermont, Ski School

**S**KI-RACING as an organized competitive sport, conducted by organizations created for that specific purpose, especially downhill ski-racing, over measured courses, is a thoroughly American institution.

The famous '49 gold rush to California made the setting for one of the most amazing and colorful dramas ever to take place in the history of sport. For entertainment, the adventurous pioneers who had built their villages high in the Sierras where snow was plentiful nearly the year-round, turned their attention to skiing, and with money plentiful, they began to bet on short downhill races. Soon better skis were developed; dope makers formulated secret waxes to add speed to the skis, and each village had its favorite son or champion who was sent out to compete in the open races. Race day became a holiday with huge fortunes being won and lost on the various favorites. Skiing thus played a most romantic role in the formulating of our Western frontier.

The Scandinavian influence in the Minnesota area helped develop ski jumping to its present high standard, but the lack of proper alpine terrain more or less hampered downhill skiing in the middle-west.

New England, with its open, rolling country side, mountain ranges and bountiful supply of snow was a haven for the out-of-door person. Snow shoes were the first implements used for travel over the heavy winter snows; by 1920 the modern shorter type of ski emerged. Bindings were crude but effective.

The modern downhill and slalom racing as we know it today in this country began at Dartmouth College during the 1920s. The spectacular winter carnival sponsored by the Dartmouth Outing Club held both downhill and slalom races, and skiers from Eastern colleges furnished stiff competition.

Then the Outing Club decided to hold a downhill race and selected for the course the carriage road on nearby Moose-laukee Mountain. This carriage road, (Continued on page 43)

## Suggestions for a Community Winter Carnival

By Bruce Guild

Principal, Iron Mountain, Michigan, High School

**I**N past years people who inhabited Northern climates have patterned their lives much after that of the bear. They have confined most of their recreational activity to the months of warm weather and when the snow and ice came, withdrew into a secluded existence to await patiently the coming of spring.

In recent years, we who live in the North have found that not only children but also adults can have fun in the ice and snow. We have learned that nothing is more invigorating, interesting or exciting than a program of community winter sports, in which the people, donning their heavy woollens and sheepskins participate and get real enjoyment. The rapid growth of interest in winter sports is evidence that this is a general trend throughout the country.

We are fortunate in Iron Mountain in having perfect facilities for all of the winter sports activities and we have developed them to the point where they amount to a whole winter of continuous activity attracting visitors from the entire middle West. The purpose of this article, however, is not to urge all who read it to go to some winter sports center to get winter recreation but rather to point out ways in which any community that has ice and snow can put on a winter carnival and arouse interest in winter recreation. To those who are in charge of recreation programs and especially to directors of school athletics the following suggestions are made.

The carnival and winter sports program may be as simple or elaborate as a community cares to make it and may be a one-day program or a week-end event. There are several essentials in promoting interest and community-wide participation which are as follows.

It is a good idea to have a comely queen to reign, at least in name, over the winter sports activities. If some sort of a plan is adopted, whereby the whole community can participate in the selection of this queen, interest will be widespread. Vote coupons may be printed in the local (Continued on page 46)

# The Style of Play Used in Winning the 1940 Indiana High School State Basketball Tournament

By Lou Birkett

Hammond Technical High School

OUR starting line-up was composed of boys averaging 6 feet, 1 inch in height. They were heavy, rugged players but none could be considered as slow movers. We played a control game on offense, believing that possession of the ball was the strongest factor in the game. Our height and excellent rebound work at both ends enabled us to control about 70 per cent of all rebounds. I think this fact alone was largely responsible for our winning the state championship.

## Types of Offense

I used two offensive formations throughout the season. When we wanted to spread a defense out and use our screen plays, we held three men back and placed two big boys in the front positions. This formation gave our two front men more room to work on pivot formations. If we wanted to throw more power underneath the basket, we moved another tall boy in under the basket.

In my back line on offense I had a boy who was a very clever and a very deceptive dribbler. He knew when to throw screens and when to break into a natural basketball offense. This boy could also score from mid-court, which made him an all-around threat. My other two boys in the back line were good drivers and excellent ball-handlers. One boy, in particular, took great pride in scoring a basket when we needed it the most.

On all of our screen plays, we had check plays developed. We would carry the screen as far as we could and if it was stopped, we would switch into a natural driving offense or reverse the ball back to mid-court and try another screen play.

Our screen plays were set up so that each play had from two to three variations. A play of this type is shown in Diagram 1. Each play would start out in a similar manner and then we would insert the variation which would keep the defense in doubt as to what was coming.

We did not have what one would call an exceptionally "hot-shooting" ball club. I think we did not have a percentage higher than .250 for any of our tournament games. Our aim was to control the ball until we obtained an open set-shot.

We used the fast break offense on most

interceptions and jump-ball situations, but my squad was not the type to use this method to any great extent. I believe that, unless one has plenty of speedsters and expert shots on his squad, it would be useless to try to use a fast-break offense completely in our Indiana high school tournaments. The winner must win ten games in succession and I do not believe a ball team can remain "hot" on their shots for ten consecutive games.

Some of the set plays used by Hammond Tech in winning the 1940 Indiana High School Tournament are shown in the following diagrams.

In Diagram 1, X2 dribbles around X3, who cuts across and sets a screen on X1's guard. X2 passes to X4; X4 passes to X1 driving into the basket. X4 then goes to the free-throw circle for the rebound. X5 pulls back and pivots to the outside and drives in for a rebound. X2 and X3 fall back to the center of the floor for a check on the play.

In the variation follow-up play, Diagram 2, X2 dribbles around X3 who goes over and sets up a screen on X1's guard. X2 fakes his pass to X4, pivots and passes to X1 driving into the basket. X4 fakes receiving the pass, pivots to the outside and drives in for the rebound. X5 pulls to the side, pivots and drives in for the rebound.

In Diagram 3, X2 dribbles around X3 who sets his screen on X2's guard. X2 passes to X4 who passes to X5. X1 had faked in and set up a screen on X5's guard. X5 gets the shot. X4 and X1 go in for the rebound. X2 and X3 check on the play.

In the 3-in, 2-out play of Diagram 4, X2 screens X1's guard. X1 dribbles around X2. X4 screens O1. X3 fakes in, pivots to the outside and goes in. X4 slides off O1, screens and goes in. X1 lobs a pass to X3. X5 comes out to check.

This play worked well against a zone defense. The success of the play was due partly to the fact that I had three extra tall boys in the front line.

## Types of Defense Used by Hammond Tech

Our team used the assigned man-to-man type of defense but we shifted our assignments when close screens were set up against us. We also employed a partial

zone at the beginning of the games or when we had acquired a substantial lead.

We generally played our men at average arms length unless we were behind or the score was close and the time remaining to play was short.

One very important point that I have noticed about the average high school team's offense is that the boys like to drive their plays mostly around the outside corners. If two outside defensive men are placed a little to the outside of the men that they are guarding, the play is forced to the inside and then if there is a very elusive guard in the center position, he is enabled to double up on the plays coming through the center of the court.

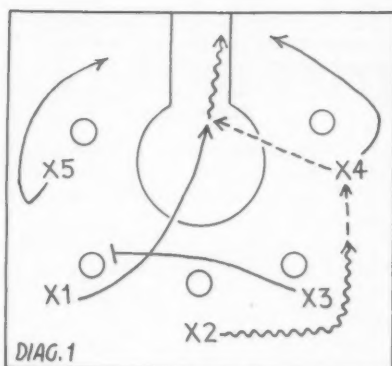
I always try to keep my tall men in the back positions on defense and have them switch assignments if an offensive player attempts to decoy them out of position.

If we are using a pressing defense when we are behind in the game, I insist that the men who are covering the outside offensive players remain close to their man and on the inside a little. With a team that floats or uses a semi-zone defense, there is a tendency for them to show a weakness in going into a pressing defense. The boys do not play the outside men close enough.

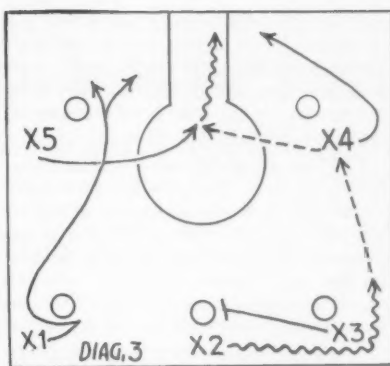
I insist that my players keep their arms in position and always remain on the balls of their feet while on defense. The position of their arms and feet is the best indicator of how the defense is holding up. When they go back on their heels and their arms drop, a team has no defense. A coach should stress the fact that the harder the boys work on defense the easier it will be to win the ball game. I realize that most boys like to get their hands on that ball and make those baskets but every good team must have a fairly strong defense.

Our team was rated as one of the best defensive clubs in the state this year. My constant insistence on good defensive work was partly responsible for this fact. The players arrived at the point where they took great pride in holding some good scorer to a few points.

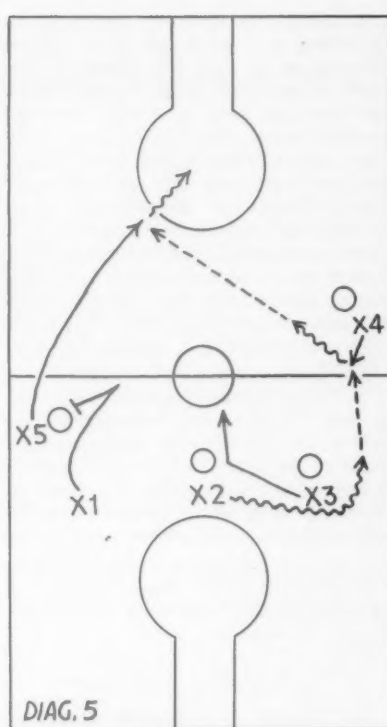
The maneuver, shown in Diagram 5, may be used against a team that employs a pressing defense, picking up their men tightly at all points on the floor. Its success depends upon how quickly the players get the play set up and timed properly.



DIAG. 1



DIAG. 3



DIAG. 5

X3 screens X2's guard. X2 dribbles around the corner and passes into X4. X1 fakes driving down the middle and pivots,

then cuts over and screens X5's guard. X5 drives in fast and takes a direct pass from X4. X5 then goes in to score. You will

notice that X3 breaks off of his screen and drives down the center of the floor. This  
(Continued on page 42)

# The Mechanics of Officiating in Basketball

By Emil L. Larson  
Commissioner, Border Intercollegiate Athletic Conference  
University of Arizona

**I**N all games it is essential that officials connected with the game be in the right place at the right time and perform effectively the duties expected of them. During the last few years manuals have been prepared for officials in football whether three or four officials are used. In basketball it is also quite essential that timers and scorers perform their duties in an efficient manner. The mechanics of officiating on the part of the referee and the umpire have been discussed in other articles and in books, but the work of scorers and timers has not been extensively treated.

## General Suggestions

The material here arranged is designed to cover only the more common situations in basketball games. A number of basic rulings are combined with the mechanics of officiating. In following these suggestions, any official is not being officious but is merely performing those activities which

are essential to insure a well-managed game. Proper attention to details makes the difference between a good game and a poor one. It is assumed that there are available two officials (referee and umpire), two scorers, and two timers.

## Pre-Game Activities

Officials should arrive at the playing court thirty minutes or more before time to begin. The official who is to toss up the ball will herein be designated as the referee and must assume the primary responsibility for a number of necessary pre-game activities. They should be performed in approximately the following order:

1. Discuss with the umpire the mechanics of officiating to be used. (See pages 76-77 of *Handbook of National Association of Approved Basketball Officials*.)

2. Discover the color of jerseys worn by the competing teams. If colors are similar, get one team (probably the home team) to change to jerseys of contrasting color.

3. Secure the game ball and check the bounce. (See rule 4, Section 1, page 4.)

4. Inspect the playing court. Note the baskets, seating arrangements for spectators, out-of-bounds territory, and any obstructions.

5. Locate the timers and scorers. Indicate the official timepiece and its operator. Make sure that there is a gong, siren, or pistol to indicate the end of the playing time and horn for scorers. Also make sure that there is a stop watch to use during time-out periods. It is well to secure the exact time and to inform coaches about fifteen minutes before the scheduled starting time, just when the game will begin.

6. Check with the timers to insure that they understand their task together with your signals. Indicate which timer, usually the home team representative, is to handle the game watch and which shall handle the time-out watch. They shall notify the referee more than three minutes and the scorers two minutes before the starting time of each half.



7. Check with the scorers with regard to their task and the signals which officials will use during the game. Designate the chief scorer (home team representative) and have him keep the score. Have the assistant scorer keep track of the substitutions and send them into the game. Recall that, at least two minutes before the scheduled game time, the scorers are to be supplied with names, numbers, and positions of players who are to start the game. Failure to do this must be reported to the referee. He may well allow the other coach two minutes after the line-up is secured, in addition to assessing a penalty for delay of game.

8. Three minutes or more before the beginning of the game and the second half the referee must notify the teams or cause them to be notified. At this time the name, number and position of the captain of each team should be secured unless this information has been obtained previously.

9. In case only one official is employed, the first (No. 1) of these steps will be omitted but other steps will follow the procedure indicated here.

### The Beginning of the Game

As expeditiously as possible the following actions should be taken by the referee:

1. Introduce the captains of opposing teams to each other and to the umpire. In presence of the umpire ascertain the position each captain plays. (Steps 1-3 may be cared for quite well before the game begins.)

2. Indicate that the visiting team captain has the choice of basket. He will probably indicate the basket at which his team has been practicing, but this is not a universal practice.

3. After the choice of basket has been made, remind the captains that only the captains may address an official except in the case of a request for time-out, which request may be made by any player.

4. Walk to the center circle facing the scorers and timers. Ask each captain if his team is ready, signal the scorers and timers and toss the ball between the centers to a height greater than either can jump. Blow your whistle as the ball leaves your hands.

5. After play starts, move to the right and keep the game moving along properly.

### Scoring

The task of scoring calls for responsibility and co-operation of both officials and scorers.

1. Note again that the scorer is responsible for recording the scores, and that the assistant scorer is responsible for recognizing and keeping track of substitutions. (See notes under "Substitutions" and "Timing.")

2. When a field goal or a free throw is made, the referee should indicate the score value with one or two fingers. He should

not blow his whistle every time a field goal is made. In the appropriate place in the score book the scorer should mark 2 for each field goal and 0 for each free throw attempted. If the free throw is successful, mark an X within the circle.

3. When an official calls a foul, he should clearly designate the offender. In case of a personal foul, he should also designate the offended player. The scorer should use the mark P1, P2, etc. in recording the fouls against any player. In case of question, the scorer should blow his horn to discover exactly who is to be charged with the foul.

4. At the close of each half the referee shall examine the score book and approve the score. He shall decide matters on which scorers and timers disagree.

### Procedure on Fouls

When a foul, either personal or technical, occurs, the action of all concerned should be such as to keep the game moving along briskly and smoothly.

1. The official who called the foul should designate the offender. In case of personal fouls, he should also designate the offended player. He should take the ball, hesitate momentarily, and then carry the ball to the appropriate free-throw line.

2. See that the players are in proper position along the free-throw lines. If the players are not clear with regard to their positions, indicate the correct positions once, at the first foul of the game (high school). These instructions should not be repeated but further difficulty should be penalized.

3. Indicate the number of free throws, one or two, to be taken and state whether or not the ball is in play.

4. Place the ball at the disposal of the free thrower. When this is done, the right to waive the free throw ceases, and time-out can be taken only by the offended team. Officials should then take their proper positions.

5. If it is a multiple throw, secure the ball after the first throw and place it at the disposal of the free thrower. Prevent unnecessary delay.

6. After a single free throw or the last of two free throws, watch to see whether or not the goal is made. If not made, watch to see that no fouls occur in the play around the basket, meanwhile moving to be out of the way of the play. If the goal is made, check to see that the defensive team secures the ball and puts it in play without delay.

7. Scorers should be alert to keep an accurate record of the fouls of any player and to inform the officials immediately when a player has four personal fouls.

8. In case of a double foul, one of which is a fourth foul on a player, require such player to leave the court and permit his substitute to make the throw.

The rules and the procedure on substitutions should be understood by coaches,

players, scorers, and officials. Care exercised here will reduce confusion and the possibility of technical fouls.

### Substitutions

1. Players in the game at the beginning of the first or second half need not report to officials but must, of course, report to the scorer.

\* 2. During the progress of the game a player (substitute) who wishes to enter, reports to the scorers (assistant scorer) giving his name, number, and position. Since a player can be in the game only three times, it is well for the scorers to make the record in the form indicated below:

On first entry leave name thus: E. Brown.

When first withdrawn, place dash after the name: E. Brown —

When the player reenters the game, draw a vertical line through the dash: E. Brown +

When the player is again withdrawn, place another dash after the name: E. Brown + —

When the player again reenters the game, draw a vertical line through the second dash. E. Brown + +

When the player is again withdrawn, place another dash after his name: E. Brown + + —

The player with the last mentioned symbols after his name cannot again enter the game.

3. After a player has reported to the scorer, it is the responsibility of the scorers to see that he gets into the game at the appropriate time. If time is not out, watch for the times when a substitute may be sent in, the most common possibilities, of which in addition to time-outs are:

- When a held ball is declared;
- When a foul or violation is called;
- When the ball goes out of bounds;
- After each free throw following a technical or double foul;
- After the first free throw of a multiple throw;
- When the ball lodges in the supports of the basket.

At these times scorers (assistant scorer) should sound a horn and the official should then signal a substitute to come on the court. After the substitute reports his name, number, and position to the official, he becomes a player. Failure to report to either the scorers or officials is a technical foul.

4. If three or more substitutes come on the court at once, the captain of the opposing team may request that the players be lined up for recognition and such a request may be granted. For less than three substitutes the officials should avoid lining up the players.

5. When a substitution is being made, the game watch shall be stopped when an

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# Citizenship Values in Athletics

By C. E. Forsythe

State Director of High School Athletics Department of Public Instruction, Lansing, Michigan

THE statement has been made by Major John L. Griffith, Commissioner of the Western Conference, that "Democracy is a glorified athletic contest". He points out that the laws of our land are like the rules of a game. The elected officials of our government correspond to the referees or umpires in our contests. The players in the game itself, as well as the spectators, make up the people of this great nation. When violations of the adopted rules of the game occur there are consequent penalties. And so it is when local, state, and national laws are broken. In a democracy the individual citizen can find his place and "play his game", provided he does it with due regard for the rights of his fellow citizens. In an athletic contest the player's aim is to win but this end may be achieved only when the code has been kept.

If the general premises which have been stated can be accepted, then certainly it behooves those of us closely connected with athletics, or those who have a real interest in them, to analyze the job they are supposed to do. Are there citizenship values in athletics? Does participation in athletic activities have a wholesome effect on boys and girls and men and women? What possibilities are there for the right kind of training for student and adult spectators at athletic contests? Does athletic competition teach respect for constituted authority? Do athletics contribute to preparedness and national defense? These questions and many others may well be asked concerning athletics as we know them today. It is probable that there is no general subject, with the possible exception of the present war, which receives more attention in the press, on the radio, or in the rank and file of American conversation than do athletics. Included in this category, of course, are all forms of recreation including hunting, fishing, hiking, camping, water sports, golf, tennis, bowling, rifle shooting, etc., as well as the great spectator-drawing athletic contests of football, baseball, basketball and hockey. We, in the United States, are the most sports-minded people in the world and the variety of sports which we have is indicative of our democratic way of life because actually we almost provide "a sport for every man and a man for every sport".

Let us devote a little time to the examination of citizenship lessons in athletics. My reference, naturally, will be chiefly to the field of high school competition because it is at this time in a youngster's life that he is most impressionable. When schools open in the fall the call goes out for candidates

for their athletic teams, not to a select few—but to everyone who is interested and physically qualified. The coaching staff then builds the teams (varsity and reserve) on the basis of proven ability during the practice periods. Students who do not possess the necessary ability obviously do not make the teams. There are, however, other jobs for them as well as for the rest of the student body. They may help in the management of the contests, be cheer leaders, ushers, play in the band, or simply be good sportsmen among the great mass of spectators in which category most of us eventually find ourselves, and that is as it should be. It is a part of the democratic way of life.

Is there anyone who would question the procedure which the average school follows in forming its athletic teams as not being a lesson in good citizenship? Players, managers, and spectators all have a place in the democratic scheme of things. The player learns that he must co-operate with his teammates if there is to be any degree of success achieved.

Democracy thrives only when there is co-operative citizenship. Of course there are leaders in athletics as well as in government, but leaders and followers each are dependent upon the other. Kipling has stated this well when he says:

"This is the law of the jungle,  
It is as old and as true as the sky;  
The wolf that obeys it will prosper  
And the wolf that does not will die."

"Like the creeper that girdleth the tree trunk,  
The law moves forward and back;  
For the strength of the pack is the wolf  
And the strength of the wolf is the pack."

Yes, there are citizenship values in athletics because "Democracy is a glorified athletic contest".

We may further question ourselves concerning the wholesome effect of athletic participation on participants themselves. Does it do anything to the individual which might pay off in citizenship dividends? It seems to me that it does because there must be some value to be derived from "playing the game" and its possible carry-over into "living the game". It is not to be inferred that participation in good, clean athletics by a high school student will guarantee that he will be a citizen of the highest order, but if there is anything at all to "example and precept" there should be a favorable balance for athletic participation. If a student athlete analyzes the values he gets from athletics, he will find

that they much more than offset what he puts into them. This was done sometime ago by an Iowa high school boy, Victor Kennard, and this is his summary of what athletics did for him:

1. I learned to control my temper.
2. I learned to exercise judgment, to think quickly and act decisively.
3. I learned the meaning of discipline, to take orders and carry them out to the best of my ability without asking why.
4. Through the training I received, I had regular habits knocked into me.
5. I learned to meet, know and size up men.
6. I learned to smile when I was the most discouraged fellow in the great wide world.
7. I learned the importance of being on time.
8. I learned to control my nerves and feelings better and to demand the respect of my fellow-players.
9. I learned to work out problems for myself, and to apply my energy more intelligently.
10. I secured a wide friendship which money cannot buy.

It is self-evident that there are citizenship values in athletics if this boy's evaluation can be accepted for any or all of its claims. Not all of the attention, however, should be given to the participant in athletics. The spectator at our team games is an important individual and one who has a far-reaching role to fill. Many of our schools pay a great deal of attention to the education of their student spectators in the rules of the games they play. This is a desirable procedure because it invariably results in better sportsmanship at athletic contests. Students understand the game better, they know when the officials are doing their job and are more respectful to them, and they are better able to recognize and applaud good play on the part of their teams or their opponents. The examples which student spectators set in the way of good sportsmanship often are the standards by which adult spectators express themselves. It is usually possible for students themselves to set the "pitch" for the "sportsmanship tune" of a community. Certainly, school men are passing up a great opportunity for good citizenship training if they do not capitalize on the opportunity to instruct their student bodies to be ambassadors of good sportsmanship.

Reference has been made to the necessity for respect for constituted authority if a democratic society is to function effectively.  
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JOHN L. GRIFFITH, Editor

## Are the People of the United States Too Soft?

IN an attempt to find the answer to the question, "Are the people of the United States too soft," Dr. George Gallup recently polled the American people. This of course is a question that has been discussed by school and college athletic coaches and directors for a great many years. We have been writing editorials on the subject or on some phase of the subject for twenty years.

Undoubtedly the majority of our people believe that our youth should be "toughened up." Some believe that this toughening-up process should be conducted by the Army, others that special civilian training centers should be established for the purpose of giving our young people physical training, and others feel that we should have hiking and skiing clubs for the benefit of our youth.

The question before the American people is now not so much whether we should have a national program of physical training but rather *how* the program should be conducted and by whom. We have always felt that the United States was unique in that the educational institutions were the athletic units, whereas in other countries sport clubs formed the nuclei around which a physical training program was conducted. We believe that our 50,000 coaches, athletic directors, and physical training instructors in the educational institutions not only have done and are now doing a fine job of work with the thirty million young people enrolled in the educational institutions but also they can increase their contribution to the national defense program by redoubling their efforts at this time.

There are some who suggest that they cannot expand the program in the school or college where they are employed because of inadequate gymnasium facilities. Very often, outdoor exercise, even though the thermometer may register below zero, is better for the young people involved than class work in a steam-heated field house or gymnasium. Wherever there is an opportunity to pro-

mote athletic sports outdoors, even though no athletic field is available, no excuse should be offered for not conducting a physical training program on the grounds that indoor facilities are non-existent or limited.

I recall the experience related by one of the older athletic directors who had coached different teams for a number of years in one of the large mid-Western universities. The institution in question had not provided a gymnasium. The boys who went out for the different teams dressed in a vacant room at the top of one of the college buildings. They did not have shower baths but took their baths in tubs. Later the institution built a beautiful field house and equipped it with all of the modern appliances. This director remarked that the teams before the days of the beautiful field house were tougher and in many respects better than the teams in that institution after the boys had become accustomed to all of the conveniences of a steam-heated modern field house.

The men, enrolled in the Army who are toughened up by and through their military training will not be trained indoors but will receive their training outdoors in all kinds of weather. We are not suggesting that the gymnasiums and field houses are not desirable equipment for the schools and colleges, but we are attempting to suggest that a coach or athletic director who has open places near his institution, although he may not have adequate indoor facilities, should not refuse to expand his program until such time as the additional equipment is provided.

## Physical Training and Sport in Germany

IN the March 1922 *ATHLETIC JOURNAL* appeared an article on the subject Physical Training and Sport in Germany, written by Mr. Seward Staley of the University of Illinois. People who have been wondering how Germany trained her forces so that she was able to achieve her recent victories over so many of the countries of Europe may be interested in knowing that a program in physical training and athletic sport was launched in Germany as far back as 1919.

Mr. Staley spent three months in Germany studying the national physical training program and on his return wrote the article in question. He pointed out that athletic activity was not confined to men and boys but that girls and women took part in large numbers; that Dr. Karl Diem, Chairman of the German Olympic Committee, gave him figures which indicated that something like five million Germans were participating in some form of recognized athletic activity; that before the last World War the Turner Societies confined their activities largely to gymnastics but since the War there was increased attention given to athletics; that health camps were being suggested for young men and women; that Germany relied on her compulsory military training program to keep her young men fit before the Ver-

sailles Treaty and after the Treaty was passed they worked out a plan of training their young men and women through the agency of sports and gymnastics; that teacher training courses had been set up in different parts of the country.

This is significant, namely, that before the first world war Germany's young men were trained as soldiers and officers by her military leaders. For the second world war Germany's youth were given training in athletics and gymnastics.

## ***The Census of Manufactures Report***

EVERY two years the Department of Commerce, Bureau of the Census, Washington, D. C., publishes a report under the heading of Census of Manufactures. A comparison of the 1939 report which was released December 30, 1940, with the Census of Manufactures Report of 1937 is interesting. For instance, the value of sporting goods manufactured amounted to—1937, \$52,074,730; 1939, \$64,753,813.

Golf is the leading item in the athletic goods field. In 1937 the total value of golf equipment manufactured was \$13,797,080 and \$15,644,612 in 1939. An increase in baseball is indicated by the total value of baseball goods manufactured in 1937, namely \$4,385,358 as over against \$6,268,588 for the year 1939.

Tennis is, of course, one of our leading sports as is shown by the total value of tennis goods made in the two periods which we are considering. For instance, \$4,628,897 in 1937 and \$4,748,509 in 1939.

One interesting item is that in 1937 1,444,345 footballs were manufactured to the value of \$1,089,729 while in 1939 the number of footballs had reached the figure of 2,588,549, the value of which was \$1,963,051.

As the number of footballs manufactured increased in the two-year period so was an increase in the number of basketballs manufactured reported as well. For instance, in 1937, there were 260,231 basketballs manufactured while in 1939 this number had increased to 501,924.

Unfortunately the Census of Manufactures Report does not include the value of track and field equipment, swimming suits and the like. It is interesting, however, to note that there were more goods of certain types manufactured in 1939 than had been manufactured in 1937. This means that more persons used football, basketball and baseball equipment in 1939 than in 1937. One way of judging whether or not a sport is increasing or decreasing from the standpoint of player participation is by studying the sporting goods manufacturers' figures and statistics. If more baseballs were made in 1939 than in 1937, it is fairly logical to reason that more boys played baseball in 1939 than in 1937.

This study is especially pertinent at this time when the value of the work that has been done by the school and college athletic departments is being

appraised. We have written many editorials in the last twenty years suggesting that our school and college coaches are serving their nation not only because they are helping develop a rugged, aggressive type of citizen for peace times but also because they are training a potential citizen army for eventualities of war.

It is often claimed that we are a nation of spectators, whereas the facts are that more and more of our young people engage in sports each year. We should not, however, be satisfied with the work that has already been done. It is our task to get more of the boys who are only partially interested in athletic sports enrolled in our athletic and physical education classes.

## ***Dr. Lewis on Athletics and National Defense***

AT the meetings of the Football Coaches Association and the National Collegiate Athletic Association and other groups interested in health education, physical education, recreation and athletics, held recently in New York, a number of outstanding addresses were presented. One of the best talks on athletics ever delivered before the National Collegiate Athletic Association was a talk by Dr. William Mather Lewis, President of Lafayette College, and Director of Selective Service in Pennsylvania.

Following are a few excerpts from his most excellent address:

"The influence and activities of our athletic departments must now extend beyond the campus confines. Sixteen million young men registered for military training on October 16 and 4,500,000 at least will be called during the next five years. During the period between registration and induction all should be taking regular physical exercise, preferably organized games.

"It is for us to promote the use of the entire athletic facilities in any community, those of the Y. M. C. A., colleges, schools and similar organizations and athletic clubs for this great project in physical fitness. If such a program is adopted in your community for a year, the number of registrants who are turned down by examining physicians will be considerably lessened, morale will be promoted and class distinctions eliminated.

"The National Collegiate Athletic Association has at its command the tools to build a stronger and more unified nation. It may be trite to say that the Battle of Waterloo was won on the playing field of Eton, but it is clear that much of the success of America's broader program of defense depends upon the effectiveness of our athletic program."

In citing that universal physical fitness is a tremendously important element in a program of permanent national defense, Dr. Lewis remarked that the rapidly expanding intercollegiate and intramural activities should not be regarded as satisfactory until every student on the campus is included in them.



# Distance Traversed by Basketball Players in Different Types of Defense

By Ray Blake

High School, Independence, Iowa

IT has been the prevailing opinion of basketball coaches of the country that one of the big advantages of playing the zone type of defense in basketball is that a man playing in that type of defense travels less than a man playing in the man-for-man type of defense. Upon looking over the literature of the field, I found that there had been very little experimental work done in this particular area, so the following study was conducted.

The problem was to find out the distance traversed by basketball players in different types of defenses.

The measurement was made possible through the development of a pursuit apparatus which provides for numerical registration of unit distances traveled. This apparatus consisted of a cardboard base, on which were etched all the markings of a basketball court laid off to scale, an impulse counter, and a small brass tracing wheel, one inch in diameter. The tracing wheel was mounted on the impulse counter in such a way that, by rolling it along the cardboard base line, unit distances were recorded. The impulse counter records these unit distances, each one of which, with the calibration employed, indicates a distance of six feet on the playing floor. Rolling the wheel from one side of the free-throw line to the other side of the free-throw line produces two impulses, which multiplied by six, gives twelve feet, the width of the free-throw circle in feet, so any inaccuracy in the results lies in the inability of the operator to follow accurately the movements of the players. A stop watch was used to check the time a man spent on defense.

To determine the distance which any player traveled while on defense during the course of the game, the experimenter would follow his excursions back and forth across the floor with the pursuit wheel. Observations were made from the balcony above the floor where a clear view of the floor was had at all times. Having different observers trace the same man made no noticeable difference in the activity recorded.

The data for this study were collected from tournament games played in the series of tournaments that led up to the finals of the state tournament here in Iowa. Players were followed in all positions—

forwards, centers, and guards, on defense during the process of the game. There was no actual selection of players to be followed. The thing that was done in the way of selection was to follow the same number of forwards, centers, and guards playing the man-for-man defense as the zone defense. A total of fifty-one games was followed during the course of this study, but only forty-four games are being used, twenty-one of them employing the man-for-man defense and twenty-three the zone defense. The reason for not using the other seven games in this study was that the teams being followed in those games changed from one type of defense to another during the process of the game. The total of forty-four games should give some indication of the distance traversed in the different types of defenses.

The figures to be presented represent the actual distance traversed while on defense, while the ball was in play (unless otherwise stated), and they do not include the distance traveled when time-outs were called.

The three types of zone defenses followed in this study were combined into one defense for statistical purposes. The three types of zone defenses followed were:

1. Two—three zone defense
2. Two—one—two zone defense
3. Three—two zone defense

In the zone style of play, each player has a certain territory for which he is responsible. The guards are responsible for the territory between their imaginary zones and the sidelines as well as for the corner of the court nearest their zone. It is assumed that an opponent will be covered by the player into whose zone he first enters until the opponent has entered a team mate's zone. The zone lines of one player are tangent to those of another. The movements of such a defense in motion looks very much as if the players were encompassed by an elastic band which is pulled with each shifting movement of the defense into a lopsided formation.

In the man-for-man defense, each player is responsible for one opponent. The moment the offense loses possession of the ball, each player, now thrown on

defense, picks the opponent to whom he has been assigned and follows him until the ball has been recovered. Usually the center guards a center, a forward covers his guard, and a guard covers his forward.

The mean distance traversed by players in the man-for-man defense was 6,461 feet or a distance of 1.223 miles, while the players in the zone defense traveled a distance of 6,067 feet (1.148 miles) on defense, the difference between the two being 394 feet or .074 miles. The man-for-man defense spent on the average of seventeen minutes per game on defense while the zone defense spent seventeen minutes, twenty-seven seconds on defense. Therefore the man playing in the zone defense traversed slightly the lesser distance and spent more time on defense, so he was not moving as much as the player in the man-for-man defense.

The range in distance traversed for the forty-four games was from 4,398 feet to 7,956 feet with the mean at 6,255 feet. This distance of 6,255 feet represents the mean distance traversed by basketball players in this study while on defense. The player that traveled the least distance in this study was a forward playing in the man-for-man type of defense. The range for the man-for-man defense was from 4,398 feet to 7,956 feet with the mean distance at 6,461 feet. The range in distance traversed by players in the zone defense was from 4,607 feet to 7,651 feet with the mean distance traversed at 6,067 feet.

The range in the amount of time spent on defense for the man-for-man was from twelve minutes, one second to twenty-two minutes, forty seconds, with the mean time spent on defense at seventeen minutes. The range in the zone defense was from twelve minutes, twenty-three seconds to twenty-four minutes, thirty-five seconds, with the mean time spent on defense at seventeen minutes, twenty-seven seconds.

The forwards in the zone defense traversed the least distance of any of the players in either of the two defenses. The guards in the man-for-man defense traveled the greatest distance of any of the players. The forwards in the man-for-man defense traveled a mean distance

(Continued on page 38)



# This is Spike MacGuire praying for a homer...



● Spike is the captain of the Avenue B Panthers. He's waiting for one of the big-leaguers to poke one right out of the park. Everytime the crowd lets loose a mighty roar, Spike scans the sky for the sight of the Official ball winging its way homerunward. Maybe he'll wait an hour, maybe a week — but sometime that gleaming white ball will come whizzing over the fence to a new home on Spike's sandlot. There, until it drops down a sewer or gets run over by a truck, it will be the symbol of heads-up baseball, big-league style.

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### BASEBALL EQUIPMENT

# Versatility in Gymnastics

By Hartley D. Price

Varsity Gymnastics Coach and Director of Gymkana, University of Illinois

A WELL-ORGANIZED gymnastic program should develop versatility in each performer. Although the gymnast is intent primarily upon learning various skills, he should be guided properly so that indirectly he may attain a development which combines flexibility with all-around muscular strength. A well-proportioned physique



Forward dislocator on the high bar

should be one of the important concomitants of an effective program.

## All Apparatus Important

Each piece of apparatus in the gymnasium should be given equal recognition by the aspiring gymnast. Specialization should not be permitted especially during the formative years of the adolescent. The coach should stimulate the beginner to enjoy performance on all apparatus, and to engage in other activities as well. Not only is this sound physiologically but it may also be instrumental in preventing staleness of the performer when he is first a beginner and later perhaps a contender for national honors. Wise coaching tends to reduce the threat of staleness. When the peak seemingly is reached in performance on one piece of apparatus, it is discouraging for the contender to keep striving for further improvement. By changing, however, to another piece of apparatus noticeable progress may be made. Such progress is undeniably stimulating, and should encourage the desire for further versatility of performance. It may seem necessary to spend much time on an event such as

tumbling but the coach should advise the performer to devote part of each practice period to the support and hang positions on the various apparatus.

## Low Horizontal Bar the Logical Starting Point

In a previous series of articles<sup>1</sup> the suggestion was made that the beginning gymnast might start his career on the low horizontal bar. This apparatus permits the beginner to develop muscles that are necessary both in the hang and in the support positions, to develop a strong grasp, and to be spotted carefully while he is learning new tricks such as the kip or



Completion of a quadruple vault with a quarter turn



Bird-up to a shoulder balance on the back swing

upstart, the forward and backward hip circles, back kip and seat rise. By mastering these tricks on the horizontal bar, he should develop confidence in himself. As he progresses from the low to the high horizontal bar, the tricks become increas-

ingly difficult, and he may reach a plateau of learning, which may be accompanied by discouragement. At such a point, the wise coach should direct the performer's attention to another piece of apparatus, with proper teaching. The pupil should learn to enjoy the change, and should be ready in a reasonable length of time to return with confidence to the high bar, there to find himself capable of effective and satisfactory progress. This procedure may be followed in regard to each piece of apparatus with the result that the student should emerge as a versatile, polished, all-around performer.

## The Performer Should Learn to Regulate His Own Training Periods

After about one year of supervision by the coach in the progression of learning, the prospective gymnast should be ready to plan his own practice periods. With the assistance of the coach, he may devise a program that will suit his particular needs. He may discover that due to sore hands, he may be unable to practice daily on the high bar. Hence he should plan to practice on the high bar on alternate days.

The gymnast, who desires to become a versatile performer, should participate in performance on different pieces of apparatus each day. He should endeavor to include calisthenics, parallel bars, side horse, rings, long horse and tumbling in his daily work-out. At first, he should endeavor to



From a handbalance, a giant roll with a half twist

<sup>1</sup>"How to Become a Successful Gymnast," "Safety Procedures in Gymnastics," "Low Horizontal Bar," "High Horizontal Bar," *Athletic Journal*.

# Look-



## 231 HOURS OF PLAY ON CRUSHED STONE\*

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for JANUARY, 1941

learn separate stunts, and later he should learn to combine these to form combinations, figures or routines.

Calisthenics may be used effectively for warming-up purposes before commencing strenuous practice each day. The gymnast protects himself against injury by thoroughly warming up as well as learning one of the events that is included in national competition. The long horse may also be used to start the practice period especially if the performer is planning to practice tumbling later on in the training period. Practice on the parallel bars, side horse, and rings will be practiced according to the discretion of the performer and coach.

#### Public Appearance Should Be Encouraged

Every opportunity should be made to perform both in competition and in exhibition. In this way confidence, ease, and finesse are developed in the performer. At the University of Illinois, the performer is able to perform throughout the entire year. Such occasions are provided by intra-squad meets, intercollegiate meets, local shows, ten road shows with



A cartwheel on the long horse.

the Gymkana Travelling Troupe and two annual Gymkana home productions.

#### Hints to Aid in the Development of Versatility

1. Practice all safety procedures during the training period.<sup>2</sup> The use of the safety belt and effective spotting should be stressed.
2. Encourage versatility rather than specialization. The performer should understand the physical advantages of all-around development. Such an attitude should be developed by all members of the team.
3. Thorough program of practice should be followed that will include all apparatus during the week.
4. Every opportunity should be made to appear both in competition and in exhibition.
5. Movies of outstanding gymnasts should be at the disposal of the prospective gymnast.
6. A stimulating bulletin board which

<sup>2</sup> "Safety Procedures in Gymnastics," *Athletic Journal*.

(Continued on page 37)

# Physical Training and Sport in Pre-Nazi Germany

By Seward Staley

Director of Required Physical Training, University of Illinois

THE recent war has been productive of a great many social, political and educational changes in Europe. Along with these other changes has come a tremendous advancement in physical training and athletic sport. To one who has traveled through Europe studying this work, it seems that the whole continent has suddenly awakened to the tremendous significance of formal and recreational physical activities. And of all the countries which have made great advancements in this field, Germany has, from my investigation, made not the least.

There is a higher percentage of amateur athletics, or rather individuals, taking part in some form of amateur athletics in Germany than any other country in the world. Dr. Carl Diem, chairman of the German Olympic Committee, gave me some figures which I herewith submit in substantiation of this statement.

The various athletic activities have highly organized national federations and have registered participating members of the following numbers:

Turners (Gymnasts) ..... 1,500,000  
 Soccer and Football ..... 1,000,000  
 Track and Field Athletics.. 800,000

THE *Athletic Journal* asks that all of its 14,000 readers in the schools and colleges of the country re-read this article written by Seward Staley for the March, 1922, issue. This article is particularly interesting at this time when much is expected of coaches in helping to harden the youth of our nation.

Swimming .....	200,000
Rowing .....	80,000
Bicycling .....	60,000
Wrestling .....	30,000
Tennis .....	10,000
Fencing .....	15,000
Golf .....	10,000
Boxing .....	5,000

Total ..... 3,710,000

This represents only the number registered in national organizations. Dr. Diem assured me that there were nearly half as many again participating in some recognized form of athletic activity who were not registered. Allowing for duplications, etc., it is fairly safe to estimate that the number exceeds five million.

I spent three months in Germany studying this work, and from my obser-

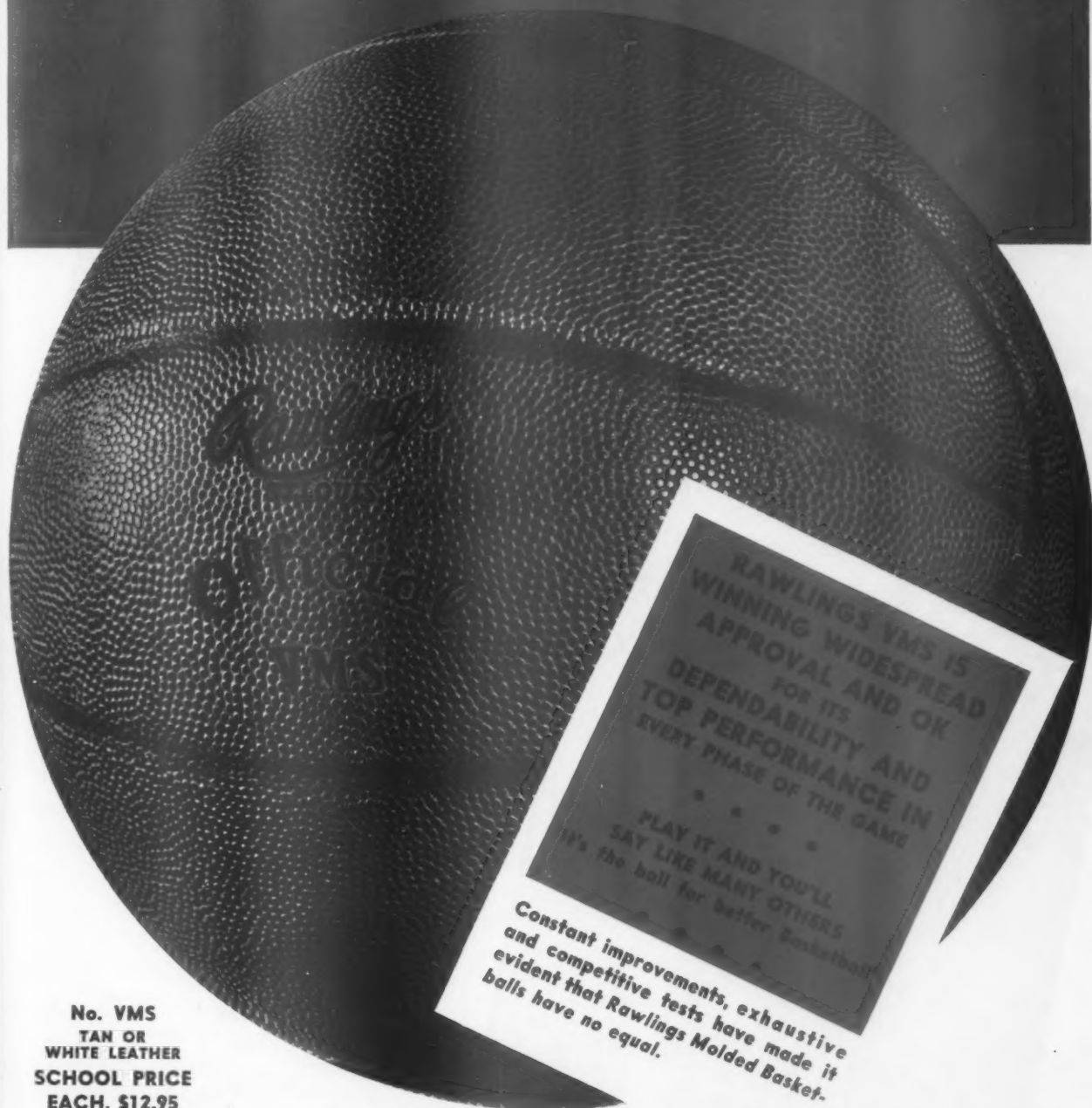
vation, which extended to all parts of the country, I am convinced that this number is not too high. I might add that athletic activity is not confined only to men and boys. Girls and women are taking part in large numbers, and I was repeatedly informed that the number was increasing rapidly.

Athletic sport also is not confined to the activities mentioned above, but includes four other games not known in this country which have a tremendous following there: Schlagball (hit ball)—a sort of mixture of cricket and baseball; Faustball (fist ball)—similar to volley ball; Handball—a mixture of soccer and basketball; and Schlendarball (sling ball)—played with a ball similar to a light medicine ball with a handle on it; this game is played by two teams, each attempting to throw the ball in the other's goal, a space marked on the ground. These sports are considered distinctly national, as baseball and basketball are here, and have a tremendous following. City, section, state and national championships are held in each of them annually.

Before the war the Turner societies  
 (Continued on page 38)



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## For 1941--

The unusual first-year demand for Compresso-Lock oblong cleats assures increased production which will be reflected in greatly reduced cleat prices for 1941.

# Conditioning and Training in Basketball

By Joseph G. Daher

Basketball Coach, Morris Harvey College

**T**RAINING by an athlete, may be summed up as the practice of developing good habits and right rules of living. It may be assumed that, if a boy comes out for the team, he has the interests of the team at heart. He should be willing to make sacrifices of a personal nature and to deny himself the great number of social activities his classmates enjoy. It is unnecessary for the coach to set up a number of rules of conduct for the members of his team, especially when there exists this common understanding between the coach and player. No coach wishes to make a detective of himself to learn if rules are being broken.

In order to adjust the heart and body muscles to the extreme tests put before them, the conditioning process should be a gradual one. No definite length of time for the team conditioning can be set. This is to be determined by the opening and closing dates of the schedule, the strength of the opponents, and the types of personnel on the squad.

One of the greatest dangers among new or inexperienced coaches is the tendency to overwork their boys. The practice session should be altered, that is, long and strenuous ones should be discontinued after good physical condition is attained. As a matter of fact, basketball, because of the type of game and the long season, finds inexperienced coaches unable to learn when their teams are overtrained, due to their desire to develop winning teams.

Since a number of coaches must be content with using the same boys in as many as three sports, much harm in their early season practice sessions may be done because the aspirants for the team are in radically different conditions. This is the opportune time for the use of a weight chart, from which the coach can learn just what each man is doing. He can thus learn the amount of work necessary for each individual. Too often a coach will guess in this matter concerning one of his boys, but the chart method proves to be his very best gauge of condition.

In early season there exist an eagerness and enthusiasm on the part of the players to make the team. The coach must not be fooled by this evidence of spirit; he must gradually lengthen his program, realizing the possibility of a long and strenuous season ahead. He should have short, snappy practices at first, with everybody doing something constructive, and with the boys enthusiastic and eager instead of

conducting long, drawn-out practices where the boys have lost the real essence of fun and play. The ideal mental state should be that of always looking forward to the next session instead of being anxious for the practice to end.

The important thing for the coach to bear in mind is that no boy can participate to his fullest capacity unless his condition is the best. Basketball is hard and strenuous, and condition is probably more necessary in this game than in any other. In the coach's desire for peak individual and team condition, the matter of too much practice must be discussed. Players should improve slowly and steadily up to a certain stage of progress. When they have become mentally and physically tired, staleness is the obvious result, necessitating the removal of the boys entirely from basketball, or the holding of practice sessions every other day. Long practice sessions, heavy schedules, worry, game practice monotony, and generally speaking, too much basketball, will ultimately cause staleness.

On the squad there may be the player who does not train, believing he can fool his coach and fans, but in real test games he fools only himself and does not deserve the confidence and respect of the other members of his team or of the people in the locality that he represents. This type of boy has everything at hand to become a great player, but due to his failure to train and condition his body, he will become only an ordinary player. If he cannot be educated to train according to the rules, he should be removed from the squad for the player of less ability who is conscientious.

A coach should be certain that his players are in the right frame of mind as well as in the right physical condition. He should study the boys that he might learn to handle them properly. Psychology and physiology tell us that individuals are different and that each boy may be peculiar in disposition and in playing technique. It is at this stage where the coach is called on to do individual coaching. This is the utmost important matter of mental fitness. There exists a close relationship here between physical and mental fitness. The factor to realize is that the boy must first be in fine physical shape to be able to assume the desired mental condition. In order to have the ideal mental state that is so necessary for proper functioning, a player should get the right amount of sleep, should be reasonably free from

worry, and his practice sessions should be made interesting and constructive. To conclude this item, a boy in the desired mental and physical condition should want to continue practice after the session is over; he should look forward to the next practice session and eagerly await his opportunity to compete in the game.

In the early season work, care must be given to the feet of the players. The players' shoes must neither be too short, nor too long, but must fit properly. Since a great amount of time is spent on offensive footwork, stops and starts, the feet naturally become tender. Blisters are formed which should not be neglected by the player or coach. A heavy-soled type of shoe should be helpful during the strenuous, early sessions of practice.

For the duration of one week, compound tincture of benzoin and solution of tannic acid should be used to toughen the feet. The feet should be painted with the benzoin compound and dipped regularly into a solution of tannic acid. Boys will naturally rush through the shower and neglect drying the feet, especially between the toes, producing an undesirable tenderness. Felt pads act as an excellent cushion in the case of foot bruises so common to the basketball player.

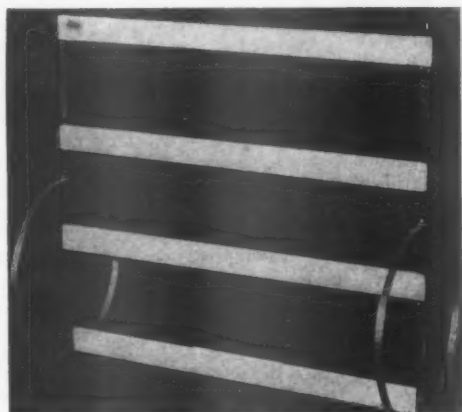
We have had marked success with the use of two pair of socks on the feet of our boys. A thin cotton pair is worn next to the flesh, and a medium weight wool pair outside the thin cotton socks. The two pairs worn together will reduce the amount of friction and perspiration, at the same time acting somewhat as a cushion to relieve shocks caused by sudden stops.

One of the most serious injuries possible to the basketball player is that of the ankle. In case of an injury, it should be soaked in cold water first for at least fifteen minutes to check any possible unnecessary swelling. Then, hot and cold applications, should be used alternately, for an indefinite period of time. This stage should be followed with a tape support, but careful watch should be made for torn ligaments which often occur and are usually detected by sharp pains in the foot. If the injury amounts to a bruise, heat applications are suggested, but no chances should be taken at the expense of the boy; his physician should be consulted.

It is the duty of the coach to rest a boy who has a hard cold. The players should  
(Continued on page 37)



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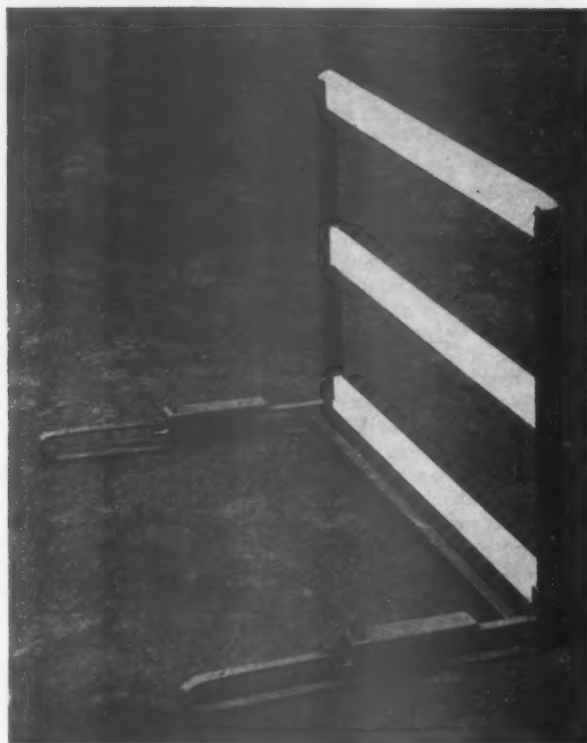
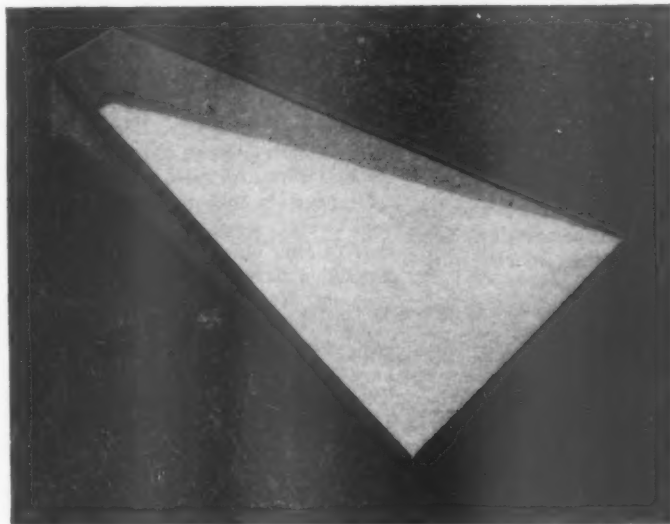
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# The Fine Points of Track Coaching

## Distance Running

By E. C. Hayes

Track Coach, University of Indiana

I WANT you to know that I thoroughly enjoyed Mr. Schlade-man's Work Program.\* I do not know what has been said on the sprint or on anything else connected with running in the clinic, but I do know that for distance candidates the thing that is absolutely necessary is for a boy to enjoy running. He must like that form of activity.

The handicap I find in boys who come to me today is, that they have had too little walking, too much riding, and too little work at home. Most of the boys really want to do something, but they have had comparatively no background.

As I talk to you about distance running, you must realize from the start that what I have to say will include everything that has been given you about sprinting, a little middle-distance running, and practically everything that has been given you about hurdling. Many people think that a distance runner is a fellow who can not sprint or one who can not hurdle or do anything else. Some of these very fine middle-distance runners would make great distance runners if they really wanted to run distance, because the qualifications for a distance runner are there.

You coaches are very fortunate, indeed, if you have a man endowed with natural speed who wants to become a candidate for distance running. He is much easier to work with. On the other hand, we have had many boys in our history of track who have taken up distance running because they liked what we call, sustained activity. You know the little boy in his play is always running. When he is six, eight or ten years of age, he is laying the background for distance running. Many of our high school and college men do not realize that the little boy does much more running during the day than our college men take in their preparation for intercollegiate competition.

When these inexperienced boys come to me, the program is usually walking and running. We live in a hilly country and I find it very beneficial to send them out on a course where they can have uphill and downhill work. Perhaps some of you coaches realize what that does to the boys as far as strength is concerned. It is a very excellent building program. The alternating of walking and running is the basis for your conditioning program.

\* December issue, page 32.

I always believe it is better to underwork the boys than to overwork them. Boys must have zest for their work and like it. There must be the spirit of play in all of their work. Therefore, you must avoid too much monotony and must not lay down any set outline of how many miles they should walk and how many miles they should run. Break it up.

We test all boys, when they come out, for speed, and are careful not to give them maximum speed until they have had enough work to toughen the muscles. If they have been playing basketball, their heart, lungs and general vitality are all right, but there are many muscles involved in track that are not involved in basketball, so you have to safeguard the boy and not let him use too much speed. As far as his general condition is concerned, he may be ready for speed, but those muscles must be ready.

Running involves all types of pace work to get an accurate measurement early in the boy's development as to what he can do in the quarter mile. You gauge his ability and his speed, his stamina or endurance, and then you give him the kind of work that is necessary for him to undergo sustained effort. When I speak of sustained effort in relation to distance running, I mean the effort of at least four minutes. When you think of some of these excellent milers approaching four minutes, that is middle-distance running, but for the majority of milers, when you get beyond four minutes then it is distance running.

The Monday workout that is given in this middle-distance program is used by a great many coaches in the early stages of the building program. This must necessarily be broken up into walking and running or running and walking. As the boy gets ready for a faster pace you give it to him and make his running a little bit farther and his walking less. That is a question of judgment on your part. You must not give the boy too much work so that he will not be recuperated the next day. You do not want him to be tired from the work he did the day before.

I give milers a mile and one-half to two miles for over-distance work. I give the two-milers a corresponding amount of

work, but this over-distance is used largely in the build-up period. This also holds true in cross-country. Instead of giving them over-distance we give them under-distance. We use the same system that Mr. Schlade-man uses with his quarter-milers.

A great many high school boys are quite thrilled when they have been able to run three or four miles. It would take an exceptional high school boy to run very fast over a long distance. Most of us do not believe in high school boys attempting too much distance and working at a fast pace, but college men are more mature and can do it with safety. All this work must be assigned according to the strength, physical health and mental attitude of the individual. One man might thrive on a mile and one-half, and another man might do better if you gave him two miles over-distance. High school boys may alternate this work between walking and running, although the strong boy may run the entire distance.

Early in the building program the pace at which the boys run is not so important, but as they get into condition, as we call it, then the pace does become very important and here is the principle that we use. The boys must be able always to end up with a faster pace and more speed than they carried anywhere during the workout, with the possible exception of the first part. They should start with some speed and end with some speed. The boy must have control of himself and run fast when he is tired. Many of the boys do not know that they can run fast when they are tired. They do not know that the change of form involved makes it possible for them to run almost as fast the first quarter as at the end of a distance run.

You may see somebody running the last quarter of the mile race in 58 seconds, which is very fast. It has been run as low as 56 seconds this year. Remember this principle then. Always end up your over-distance work with speed.

I have given that program of work for boys in every stage unless weather conditions or some other conditions around the institution make it necessary to change the program. We do not stick to any schedule of work because I do not want the men to come out on Monday thinking that they have to do a certain thing, and that on Tuesday they will do thus and so. In fact, I do not let them know what they are going to do, except in a general way because I do not want a man dreading over-distance work. I may give him relay work entirely.

Often on Monday I mix the entire squad up and give them relays. I think the results along that line are very helpful in

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**THIS** is the last of a series of informal talks given by college and university coaches at a high school clinic sponsored by the University of Minnesota. These articles have appeared in the fall issues.

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# ATHLETIC HEADQUARTERS

## IN CHICAGO

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getting the boy away from himself and getting him with teams. I may make a relay of four, six or ten men on a team; but I am very careful to fit men in so that their assignment will not be beyond their ability. Very often on Monday I give them a continuous relay which may involve fifteen or twenty men. You coaches may use it for any number and then repeat. That does two things. Some of the boys are running at a much faster pace than other boys. Some are running at a pace corresponding to about 60 seconds for a quarter, and that is the pace a great many coaches use for their distance men. When I assign relay work the number one man runs at a 60-second rate; it may be the first four men run at that rate. The next four men might be slower so that their assignment would be about 32 seconds for 220 yards. You may have groups with assignments up to 36 or 37 seconds. The number one man repeats when his turn comes again. We may repeat five or six times, but the repetition is excellent. The point I wish to emphasize is, that the repeated under-distance is probably the most valuable method you can use for developing stamina and endurance for pace work.

We give over-distance on Monday, and on Tuesday we give the under-distance work. We break it up into speed work for a miler, and we usually think in terms of a quarter or a half, or we can break it up into 220's. For a 440 man, this speed work would be about 2:15. This might be excellent for one man, but you may have to go down to 2:14 or 2:12 for another. You must always be thinking of the ability of the boy and always give him something he can do, but never give him anything he can not do. He will get much satisfaction out of it and be eager to do more. If he runs his 2:15 half-mile, you must be very careful to get the proper relation between the first quarter and the second quarter. Many milers run too fast in the first quarter and too slowly in the second and third quarters. Consequently, the work that you give them on this day is very very important as it gives them a good sense of pace.

You must always understand the conditions under which the man is working. If you have an adverse wind or if the temperature is such that it handicaps the man, you must make an adjustment in your assignment, and a great many coaches do not do that. They give the boy an assignment that will not develop his sense of judgment under normal conditions, and every boy running should be able to analyze the conditions which will affect his own pace. This then would be under-distance at a faster pace than your racing speed, and it is repeated. The reason we usually repeat is to check on what we have done in the first attempt. If we have run the first mile and one-half a little faster than we will use in the competition, we would give another assignment over exact-

ly the same distance and make it lower. We might say it will be 2:20. If we assign 2:20 we want the first part of the next half to be slower and at the first part of the other half we start picking up. We want the same proportion between the third and fourth quarters that we had between the first and second quarters, in reverse order.

A few minutes ago I said that the boys must finish fast when they are tired, when their edge is worn off, so we assign perhaps the first 220 yards of the first quarter to be anywhere from 72, 73 or 74 seconds, making the third quarter of a mile possibly the slowest that they might run. But if they run in 73 or 74, then they have to come down to 66 or even faster on the last quarter, and most of the speed will be on the last 220.

One important thing we must do on the second half of the assignment is to keep the boy's mind on the necessity of running fast when he is getting tired. That means he must check on his form; there are certain things that will come to his rescue. I might mention one or two of them.

He must be mentally alert on the time that he is pacing. Some of the boys just race. They are real competitors and refuse to be defeated. But no one is so good that he can not be defeated. If a man is going to make the best of his ability he must know where he can put on his sprint so he can wind up with a fine kick and not be completely exhausted. I do not believe in high school boys or college boys running distances and coming in exhausted. A very interesting thing in my work has been that the boys we have had running races and repeats, show less distress after the second race than most milers do after their first race. From the standpoint of health I think that is worth much. Our training is such that the boys' natural strength carries them to the heights and that is why they can run meet after meet without any serious effects.

Oftentimes when you have checked on the first two assignments of the boy you find he has failed, and you might think you have worked him too hard. But if the boy was off somewhere in that race we give him 110 yards, and it may be that whatever we give him is within his ability. We might have two half-miles within his ability. When we go to quarter-miles, instead of using two assignments we would use three and make the first one fast, perhaps 60 seconds, and the next one 65. On the third one we would give him an assignment like this: The first 220 yards in 35 seconds; the second 220 yards in 30 or 31 seconds, ending up with speed as the boy gets tired. If coaches just carry that principle right through it is amazing how quickly boys build confidence in their ability.

The first man I ever had win a mile under 4:13 did not use very good judgment, but when he had run it he came to me

and told me that he felt better after that race than he had felt after running 4:21 or 4:22. Getting under 4:20 for a college man is quite an accomplishment, and he ran 4:12.5. The surprising thing to me was that he felt so much better after running 4:12.5 than he did after running 4:21 or 4:22. After he became a little more experienced he ran faster than 4:12.5, and when he got down to 4:10 or 4:11, he was satisfied that he was doing better with his body than when he ran at the slower pace. That is, when he went out with good judgment on the first half and finished up with good judgment on the second half of the race, he was still not exhausted. You must be very careful not to exhaust high school boys. Give them enough work to develop good judgment so they will finish fast, but they must not become exhausted. They must have the feeling that they are getting stronger and building up more power.

Sometimes instead of giving them this program, I give them five 220's consecutively. I mentioned five 220's because I give them a very definite assignment for each 220. When I find a college boy who can run five 220's in a row, then I know he is in shape to run a half-mile or a mile, two miles, or almost anything he wants to run.

QUESTION: How much time elapses between the 220's?

MR. HAYES: They are continuous, no rest at all in between them. Here is the way they will finish running them. They will run the first one in 28 seconds and the second in about 29, the third in 30 and the fourth they will be slowing up and may go down to .32. Then they will try to speed up, particularly on the last 110 yards. That is a tremendous assignment, but we use it to break the monotony of the half-mile and the three-quarter mile.

Wednesday is the day for pace work. We give the pace work at the actual speed the man is to run. If he is a good man, we do not put him on his racing speed that day but if he is inexperienced and not developed and has a sense of pace, we may give him three-quarters of his race at the pace we expect him to run during the race. If he is a 440-miler running a 330, three quarters, we do not end him with speed, we just give him speed; sometimes 77 or 70, and sometimes 68 and 69. After he does that we review it and if he has failed on that, then we put him through the part on which he has failed. The boy often fails on the first quarter and if he fails on that, we repeat it. We always give him the last quarter separately. I should not say always, because there is nothing hard and fast about this. It depends upon the individual and the circumstances.

After he has had the first three-quarters, then we have the one mile or two miles, or whatever it happens to be. We may

give him a mile and one-half here, although in the competitive stage we do not use that very much. We come to it last and we try to send him at the pace for the first 220 yards. Then we try to have him pick out the points where he is going to increase his pace for the last quarter of a mile. Some runners start with 350 yards. At Princeton last week the boy won the mile by going out just after he went around the turn. He went out, got the lead, and the boys never could catch him.

On the last quarter we usually have the man start out and if he is a 440-miler, he will be running at 35 seconds for the first 220 and towards the last we have him give everything that he has. He will run as hard as he can. He uses two kinds of form.

We are always careful to have the boys wind up with the sprint form when they are tired. If there is anything different in our method of coaching, it is that we use that principle more than most coaches.

This is an important day as far as building a sense of pace is concerned, and I feel very much disappointed in any individual who cannot run a set the way I tell him to run it after taking into consideration the weather conditions.

On Thursday we do not exactly make it a play day, but we certainly do make it a change in the program of work. If we can make it a play day, it is one of the finest things that can happen to a group of men. They have a great deal of fun without much serious responsibility connected with it.

If I have a boy who has no sense of pace, I very often give him an assignment of running the first quarter of his race. I ask him to show me what he is going to do on Saturday for the first quarter, and then if he has come through his work well, I often repeat part of it. I might ask him to show me that last quarter after he has walked around and thought about it. If he has failed on this, I ask him to repeat it. If he has succeeded, then I give him the latter part of it and if he has done well on the last quarter, he can say to himself, "I am all right and I will be able to judge my pace." It may be he will and it may be he will not. When human beings are in competition, they often become over-stimulated and forget all the things taught them. If he is a smart boy, he will use the ability he has to analyze himself, plus the ability to judge his competitors. Then he will know what he is doing and that is what all great runners have done.

After Thursday's workout we always rest on Friday unless we have a boy so nervous that it would be better to give him practically nothing on Thursday and take him out and give him just a warm-up. I want you to remember what Karl Schlademan said about warm-up, because

(Continued on page 37)

# GYMNASIUM EQUIPMENT



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# Student Athletic Association Supports Athletic Program and Provides Training in Democracy

By Wesley Lauritsen

Faculty Manager of Athletics at the Minnesota School for the Deaf  
Faribault, Minnesota

**S**UPPORTING a fairly heavy athletic program in the high schools of our country, especially in the smaller schools, is a real problem for many coaches, athletic directors, and faculty athletic managers.

The high school department of the Minnesota School for the Deaf, located at Faribault, Minnesota, has a plan that has stood the test of time. The plan not only supports the athletic program, but it also offers unparalleled training in democracy.

The plan described in this article did not come into existence at once, but has gradually been developed during the past eighteen years that the writer has been faculty manager of athletics at the school.

With proper faculty supervision this plan should work in almost any high school. The responsibility for the program should not be placed upon the coach who is usually overburdened with scholastic and coaching duties. The work should be given to a faculty man who is willing to co-operate with the coach. The coach will usually welcome this assistance, and the faculty man can make the work his hobby and get a great "kick" out of it, just as the writer has.

The boys in the junior and senior high school departments are organized into a Boys' Athletic Association, a voluntary, democratic organization. The membership is open to all male students whether or not athletes. The object of the organization, according to the constitution, is to promote pure amateur sport at the school. It does this and a great deal more.

Members fifteen years old and under pay annual dues of one dollar; members sixteen years and over pay annual dues of two dollars. The age is reckoned as of September first. This membership fee entitles the student to see all home games in all branches of sport; it further entitles him to participate in all athletic activities, the association furnishing the equipment.

About 100 boys, which is close to 95 per cent of those eligible, are members of the association. We think that this is an exceedingly good percentage. There are always a few boys who really cannot raise the small membership fee. Arrangement is made for these boys to earn the necessary amount by marking the field, park-

ing cars, mending equipment, setting up bleachers, and doing other chores for the organization. Compensation is at the rate of fifteen cents an hour. Each student working for his fee is given a time card which is kept in the faculty manager's office, and the problem is taken care of in a simple and business-like way.

Regular business meetings for the election of officers are held semi-annually. The first meeting is held as soon as convenient after the opening of school in the fall and the second as soon as convenient after the first term examinations. The elected officers of the association are a president, a vice-president, a secretary, and a treasurer. These four officers, chosen from the upper classes, constitute a board of directors which has direct charge of the affairs of the association. The board appoints committees and assistants as necessary. This board meets twice a week at a definite time with the faculty manager of athletics. It is at these meetings that most of the work of the association is planned. Provisions are made for special meetings of the association as well as of the board. All students are urged to express their views at regular or special meetings in a democratic manner.

- The faculty manager of athletics, who is appointed by the superintendent of the school, acts as advisor to the athletic association. He attends all meetings of the association and of the board. He advises the students as requested or as necessary. Extreme care is exercised in this so that no one will have opportunity to think that he is assuming the role of a dictator. The students are urged to express their own views and to use their initiative. We impress on them that it is their organization and insist that they do as much of the work as they can. All are asked to take an active part in the activities and we believe that this is one of the secrets of success to get results with young people.

The students can and do take care of many details that are often taken care of by faculty members. The members of the board often know the student qualifications better than faculty members and they show rare judgment in appointing students to specific posts. For example, at a

basketball game on the home floor it is necessary to have several assistants, such as a ticket seller, a ticket taker, three guards at the doors that cannot be locked from the inside on account of fire regulations, a scorer, an electric scoreboard operator, a crew to set up and take down the bleachers, and in case of games where large crowds are expected, a crew to look after the parking of cars. We insist that everything be done in an efficient and business-like manner. Numbered roll tickets are used and the ticket seller accounts to the student treasurer right after each game, the faculty manager checking on tickets and cash. The boys get a pat on the back when they do things just right and they evidently take pride in their work.

The association has had lean years and fat years, just as most business organizations. It has adopted a pay-as-you-go policy, and when the treasury is low, expenses are reduced. No debt is ever incurred. As a business organization with definite obligations to meet, there should always be a bank balance of at least two hundred dollars; it would be still better if this were four hundred dollars or more. Only on rare occasions has it been that much. At this writing the balance is just under one hundred dollars, but we have recently spent considerable for equipment, much of which should last a long time.

The most important student position in the association, and perhaps in the school, is that of student treasurer of the athletic association. Each year a thousand dollars, or more pass through his hands and he is required to account for every penny. Much of the money is in small amounts and it calls for a responsible person to handle it. The faculty manager assists the new treasurer as much as necessary. After a month or two he is usually able to do the work himself, though a little assistance in closing the books on the first is often necessary. One year when several tournaments were held in our gymnasium a student treasurer handled three thousand dollars. Some persons may feel that this is giving the student too much responsibility. The treasurer is usually eighteen to twenty-one years of age. Careful check is made by the faculty representative



when large amounts are taken in and the school vault is made use of until the money can be deposited in the bank. On the first of each month the books are closed and sent to the office for careful audit by the steward of the school and for inspection by the superintendent. The student treasurer gains valuable and practical business experience. Since a new and business-like bookkeeping system was put into operation about fifteen years ago, no money has been lost.

The treasurer is provided with a large and strong safe box, a cash book in which he enters all receipts on the left hand side and all expenditures on the right hand side, a duplicate receipt book, and a large check book. He is required to write a numbered receipt for all cash that he takes in. He has a petty cash box from which he may make cash payments when the expense is less than a dollar. Expenses of a dollar or more are paid by check and no check is valid unless countersigned by the faculty manager. When school opens ten dollars are put into the petty cash box. When he pays a bill of less than one dollar he gets a receipt and puts it into the petty cash box, so that the cash on hand and the total of the receipts in the box always amount to ten dollars. On the first of the month he writes a check to the order of petty cash for the amount he has paid out of this box during the month and then starts the new month with ten dollars in the petty cash box. All the money he takes in is deposited in the bank. This is a very simple system and one can instantly check on the money on hand. The treasurer is not allowed to keep more than fifteen dollars on hand at any time. If not convenient to go to the bank, he may leave the excess cash in the school vault or the athletic department's own safe.

The athletic board appoints a student candy salesman who sells candy at all home games and at specified times during the day. Students will get candy whether they buy it at a store in town or at their own candy store. Each year we sell from three to four hundred dollars worth of candy, with profits well over one hundred dollars. The student candy salesman is given 10 per cent of the profits for his work. He is required to make a written report each month.

A condensed financial report of the association for the past school year is given below as it gives a clear idea of the work carried on by the organization:

#### RECEIPTS

Balance brought forward.....	\$135.45
Membership fees .....	139.00
Sales of season tickets.....	48.25
Gate receipts .....	86.10
Guarantees .....	255.54
Candy sales .....	292.69
Sale of gymnasium suits.....	112.70
Sale of warmup shirts.....	38.00
Sale of tennis shoes.....	37.00

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Athletic accident benefit.....	31.50
Homecoming-party, supper, pop, etc. ....	99.83
From players for hotel in Chicago	24.00
Sales of socks, etc. to player.....	12.62
Miscellaneous .....	37.97

Total receipts .....\$1350.65

#### EXPENDITURES

Transportation .....	\$195.68
Meals on trips.....	100.55
Officials .....	94.00
Guarantees .....	60.00
Gymnasium suits for resale at cost	112.70
Tennis shoes for resale at cost....	37.00
Warmup shirts for resale at cost..	38.00
Socks, etc. for resale at cost.....	12.62
Supplies and equipment.....	120.82
Balance on electric scoreboard...	47.67
Homecoming expenses .....	52.78
Candy .....	194.40
Commission to candy salesman...	10.00
Y. M. C. A. Hotel, Chicago.....	28.00
Insurance on school bus.....	23.77
State High School League, dues and supplies .....	15.75

Dry cleaning of basketball equip- ment .....	12.00
Miscellaneous .....	108.04

Total expenses .....\$1263.78

#### RECAPITULATION

Total receipts .....	\$1350.65
Total expenditures .....	1263.78

Balance on hand.....\$ 86.87

The athletic association does not formulate the general athletic policies of the school. This is in the hands of an athletic advisory board composed of the superintendent, the principal, the faculty athletic manager, and the coaches of the first teams. Suggestions from the members of the athletic association are welcome and may be brought before the advisory board by the faculty manager. This is an extremely important board as it serves as a clearing house for ideas, giving every man who has an interest in the work an opportunity to express his views on athletic matters. There will naturally be some difference of opinion on some questions. We

have found that by sifting ideas at meetings of this board the best way will usually be found to get around a problem. Schedules and officials are among the matters taken care of by this group.

From the foregoing brief summary of the activities conducted by the boys' athletic association it will be seen that it is a real service organization. When tournaments of the various high school groups are held in the gymnasium the boys work hard and willingly to make them successful. The profits from tournaments have helped to make possible some of the events sponsored during the past few years. Of course, the boys can not do everything, but with sympathetic help and encouragement from the superintendent, the principal, and other faculty members, the work as outlined, and a great deal more, has been successfully carried on.

The Minnesota School for the Deaf is a member of the Minnesota State High School League and plays complete schedules in all branches of sport with high schools in the vicinity.



## Team Co-operation

By Howard Lester

Coach, Waterloo, Illinois, High School

### Make Your Criticism Helpful Criticism

ANY criticism of each other must be given in a spirit of helping—there must be no ridicule in your voice; if you cannot talk with control of yourself, then keep still until such a time as you can. There must never be any criticism of shooting unless the shooter passes up someone who was absolutely in a better position. Remember we all miss shots, even perfect set-ups, and often at the most inopportune times. Make this literary gem, "To err is human, to forgive divine," your slogan when you feel ready to criticize.

### Stop, Think and Reason

During the heat of a game, especially if you allow yourself to get excited, you

often say things for which you are sorry. It is much better to Stop, Think, Reason, and then do your talking.

### Show Loyalty for Your Team Mates

Remember this: We are working as a unit; no one man is any more important to the success of the team than another. If you find some fellow student or adult criticizing a squad mate, he is evidently the type who, when you leave, will probably find fault with you, so never pass up an opportunity to defend your team mate. You know his strengths—elaborate on them, and soon we will have people praising

strong points and not finding fault. Your loyalty to each other from now on will make the differences between real success and a mediocre season.

### Be Loyal to Yourself

There is another type of loyalty that is extremely important to our future success and that is loyalty to yourself. You never know exactly when your opportunity will occur to help make the difference between winning and losing. If you fail to keep faith with yourself by getting and keeping in good physical condition and attending practice regularly with the idea of self-improvement, you are lacking in self-loyalty and will not be ready to make good yourself. This business of loyalty to yourself is really serious and some of you have taken it as a joke. You must be willing to sacrifice for yourself and in so doing, you are sacrificing for all. Some of us have learned to do this and are carrying the brunt of the task; the rest must

*THIS column was temporarily discontinued through the fall months because of lack of space. Coaches who do not have time to write articles of length are invited to send their contributions to this column. You have some good suggestions, why not pass them along to your fellow-coaches?*

reach this stage or fall by the wayside.

This week we play a strong opponent. We may need ten or twelve boys in top physical condition to win. We will not have them because of lack of self-loyalty. Some of you will not get eight or nine hours sleep each night. Some of you prefer to spend your time carousing around—"tomcatting" nightly—and then wonder why you cannot stand the "gaff." Some of you are not able to stand up to five minutes of actual game playing. Instead of setting aside only Saturday night (or on occasions of Saturday night games, Sunday night), several of you continue to make three or four nights each week a gay festival. Your loyalty is great by word of mouth, but actually it is not there. You must sacrifice, and it takes more than just talking to do it. If your lady-friend does not understand, then she is extremely selfish and will never learn to sacrifice herself. Are you interested in that type of a person? If you are, then you had better sacrifice basketball for the young lady, and we will win or lose without you.

I am serious about this business of condition and loyalty and believe that if you will think about it enough and practice it continually, we have an excellent chance of winning about 90 per cent of our remaining games. Let us get behind each other and really "go to town."

## Notes from the Diary of a Basketball Coach

By Alfred T. Gipple

Basketball Coach, Hershey Industrial School

THERE is no question as to whether short shots from the side of the basket should be banked but authorities disagree as to whether or not short shots from directly in front of the basket should be laid right over the rim or banked. Clair Bee is of the latter opinion. After much experimenting I am inclined to agree with him. I base my conclusion on the following points: (1) There is less chance of the shot being blocked because the ball travels more vertically than horizontally; (2) There are greater follow-up possibilities, if the goal is missed as the ball bounces higher and gives the shooter a chance to get set for a second jump; (3) It takes less accuracy for the ball to go into



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the basket because the course of the ball in coming down to the basket is more in a vertical direction than in a horizontal one and as many shots of the type are thrown in a hurry they can be shot with greater speed and still hit their mark; (4) If the shot is very short it will not go under the rim and bankboard and fly out-of-bounds under the basket.

#### Note 2

The greater variety of passes a team has mastered the more effective will be the offense. Every young coach should see the exhibition given by "Chuck" Taylor to realize what can be done in ball-handling. Prior to the first time I saw him in action we spent a good deal more time on pivoting than was necessary. Understand I am not underrating the value of pivoting. We teach a combination of about nine different pivots. Incidentally, one of the best books on pivoting, in my estimation, is Ward Lambert's Practical Basketball. Too many times the coach has to grind his teeth and pull his hair because he sees one of his players with the ball pursued by an opponent until the opponent finally ties him in a knot and either takes the ball away from him or gets a jump ball. The objective in passing I set for every player is that he should be able to pass the ball in any direction with either hand while standing in any position. This includes sideward and backward passes as well as forward passes to be made with either or both hands. It sounds like a difficult assignment, and it is, but it is attainable. It is not too early to start a boy toward this objective when he is in junior high school.

#### Note 3

A common woe one hears from many coaches is that their players can make their free-throws in practice but they cannot make them in games. There are many so-called solutions to this problem, two of which have given us a fair amount of success in free-throw shooting. First, I have the boys shoot about half of their free-throws under game conditions. That is, instead of shooting their quota for the day whether it is twenty-five or a hundred (we shoot only fifty a day because of the limited practice time) by standing and tossing the ball toward the basket until the quota is reached they shoot half of these under the following conditions: (1) Immediately after a severe drill when their bodies are somewhat fatigued and heated; (2) As a contest one boy against another or one group against another group. I prefer lots of razzing, heckling, and booing during these contests; (3) When a foul is committed in scrimmage the one fouled shoots three free-throws instead of one or two. The free-throws made are always added to the score. Secondly, in the actual games the

players stand on the free-throw line and slowly count to five before they make any attempt to measure the shot. I want them to repeat the numbers plainly to themselves and concentrate on the counting. This five-seconds time-out takes their mind off of the game and momentarily relaxes them. This second method seems to be especially effective for boys who are inclined to be high strung. It works for me, I would not guarantee it for you but

### PLAY THE GAME

Quit your crabbing, quit your gabbing,

Just get in and play the game,—

Quit your fussing, quit your cussing,

Do honor to your name.

It's no use to be dejected,

Just get in and be respected,

And do more than is expected,—

Play the game.

Quit your growling, quit your howling,

Get in and help the team.

Quit your bragging, quit your lagging,

Make a victory gleam.

Win the game, be winners all,

Do your best at every call,

Be a fighter till you fall,—

Play the game.

Quit your dragging, quit your nagging,

Help your men along;

Do some coaxing, do some hoaxing,

Show them you are strong.

Slap your teammate on the back,

Make him feel it,—make it smack,

Let him know your pep's not slack,—

Play the game.

Quit your slugging, start to lugging,

Work on court or field.

You're a licker, you're a sticker,

Never known to yield.

Don't you for a moment loiter,

You're a winner, an exploiter,

Show them how to reconnoiter,—

Play the game.

L. L. Thompson,  
Superintendent of Schools,  
Baldwin City, Kansas.

if this problem is one of your woes, give it a fair trial.

#### Note 4

It is not the wisest policy to have a player in the starting lineup as the first replacement for a player in another position. For instance, do not have the starting right forward replace the center in case the center cannot play because of injury or has to leave the game for any reason. If that forward is injured or sick the coach loses the equivalent of two players, the starting forward and the substitute center. Another reason why this is not the

best policy is because most high school players have enough trouble trying to master one position. When the responsibility of learning two positions is thrust upon his shoulders he does not become as proficient in either as he would if he could spend all his time in practice in the one position.

#### Note 5

Last year after a lapse of one year we made the third quarter our best scoring quarter. To me this is one of the most important strategies in high school basketball. A few points difference in score at the end of the first quarter or at the end of the half is no criterion for predicting who will win the game. However, the team going into the fourth quarter with a lead usually gains the victory. In every one of our seventeen games last year the team that was leading in score at the end of the third quarter won the game, and yet, in eight of those games the difference at that time was four points or less. Why should such a small difference in score at the end of the third quarter be so important a factor that it means the winning or losing a ball game? I think the main reason is found in the minds of the boys on the floor. It is difficult for them to realize that the last quarter is eight minutes long, just as long as any of the previous quarters and that if they take their time and play rational, determined ball, although trailing a few points, they can win. Instead, they see the last quarter coming up, they are behind in the score, time seems to pass much more rapidly than it actually does, and above everything else they want to win. The result is that they become over-anxious and over-excited. They are too tense to handle the ball accurately and forget many fundamentals of play and strategy in their wild desire to turn defeat to victory. The opponents take advantage of this situation by gaining frequent possession of the ball through pass interception, steps, wild shooting, etc. In the meantime your team is caught flat-footed in its front court while the opponents start their own offensive. In those few minutes of wildness the opponent's score soars. What was only a few points difference in score becomes such a great difference that even a substantial spurt will not close the gap.

I wonder how many coaches have seen this happen to their team?

What is the best thing to do about this only too common situation?

The answer is obvious. Build up a lead during the third quarter so that the other team is the one upon whom is the pressure. As we all know this is not near so easily done as said.

This brings up the importance of third-period play. How to emphasize this third-period play and make its importance realized by every player is a discussion in itself.



## Versatility in Gymnastics

(Continued from page 22)

illustrates all forms of gymnastics, both competitive and exhibition should be provided.

7. Excellent equipment should be provided.

8. Adequate publicity is stimulating.

9. The performer should not practice to the point where he becomes fatigued otherwise he is apt to be injured.

The plates in this article illustrate the versatility of Captain Paul Fina<sup>3</sup> of the University of Illinois. The illustrations show tricks of a high degree of difficulty on all pieces of apparatus.

<sup>3</sup> Paul Fina is the 1940 National All-Round Collegiate Gymnastic Champion.

## Conditioning and Training in Basketball

(Continued from page 26)

be instructed to dry themselves carefully and cool off well before leaving the gymnasium for the open air. Colds not only destroy team vitality, but also may be the cause of a number of serious illnesses, resulting in sometimes permanent incapacitation of the players. Players should drink plenty of water and, if necessary, take mild laxatives especially during the early part of the season, so that all waste material may be freed from the body.

Common sense should be the watchword of every coach in the conditioning of his players, the welfare and health of the boys being the determining factors. He should always remember that basketball is a grueling game; it is strenuous from beginning to end, and requires everything a boy has in physical stamina.

## Distance Running

(Continued from page 31)

it is of tremendous importance. The warm-up period should consume about 15, 20 or 30 minutes, and is probably about the most important period of the boy's program and must never be neglected. When we take the nervous type and give him a little warm-up, we find he sleeps better and will calm down and do better on Saturday.

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## Physical Training and Sport in Pre-Nazi Germany

(Continued from page 22)

which abounded throughout the country, confined their activities largely to gymnastics. Since the war, I was repeatedly informed, and further saw with my own eyes, that these organizations, if not lessening their interest in gymnastic work, are at least devoting a greatly increased attention to athletics, soccer, track and field, rowing, swimming, and so forth; the tendency is away from gymnastics toward athletic sport.

In expression of this new trend of mind, the government is now considering the passage of a compulsory physical training law. The only reason the law has not been passed is that the legislators cannot agree as to the nature of it. Compulsory physical training has existed for a long time in the elementary and secondary schools. The present consideration involves principally (1) the idea of health camps for young men and women, and (2) more play space in the cities. Before the Versailles treaty, Germany relied on her compulsory military training laws to keep her young men fit. Denied this opportunity now, the proposal is to have a compulsory physical training law whereby young men can be assembled annually for a period of six months or longer and through a thorough course in physical training, including gymnastics, football, track and field athletics, swimming, rowing, and other athletic activities, be placed at the top of their physical condition. If this proposal goes through and gets by the French watchdogs, those who are familiar with the value of physical training in warfare must realize that after all Germany was the great benefactress of the Versailles treaty. I shall not rhapsodize over the other advantages of such a law, but I might point out that if it does go into effect, the American people can offer now a fond farewell to Olympic championships and all such.

The second aspect of the proposed legislation involves the laying out of greatly increased playing areas in the cities. The proposal is to make each city establish

play areas—so many square meters per capita. If this is done, it will simply give athletics and outdoor sports another stimulus thereby aiding and insuring the health and welfare of the nation.

To provide directors for this new movement in physical training and sport, the German Olympic Committee has opened a school of physical training just outside Berlin. The school was opened in 1919 and already, in its third year, has an enrollment of 400 students, thirty of whom are women. The school offers a three-year course and covers theory and practice in all sports, theory and practice in gymnastics, free-exercise, and allied subjects, anatomy, physiology, psychology, corrective gymnastics, massage, pedagogy, and so forth.

Most notable of all, however, is the research work that is being carried on. In this field the school is far ahead of any that I have come in contact with and I am familiar with practically all of them, both in this country and in Europe. The school is established at the Stadium that was erected in 1913 for the Olympic Games, which were to have been held there in 1916. The faculty is composed largely of professors from the University of Berlin. All in all, the school has made a wonderful start and bids fair to be one of the leading institutions of its kind in the world.

## Distance Traversed by Basketball Players in Different Types of Defense

(Continued from page 18)

of 5,605 feet (1.06 miles), while the forwards in the zone defense traveled a mean distance of 5,442 feet (1.03 miles). This makes a difference of 163 feet or .03 miles less that the forwards in the zone defense travel than forwards in the man-for-man defense while on defense.

The guards in the man-for-man defense traversed the distance of 7,023 feet (1.429 miles) while on defense. The guards in the zone defense covered a distance of 6,420 feet (1.308 miles). This makes a difference of 595 feet or .121 miles less that the guards in the zone defense traveled than the guards in the man-for-man defense while on defense. The forwards in the zone traveled the least distance of any of the players in that type of defense, 5,442 feet; the centers were next in line with 6,131 feet, and the guards covered the greatest distance, a distance of 6,428 feet. This means that the forwards had to travel 986 feet less than the guards, and 689 feet less than the centers. The centers had to travel 297 feet less than the guards.

In the man-for-man defense the forwards also traveled the least distance of any of the men in the three positions

when they traversed the distance of 5,605 feet (1.06 miles). The centers were next in line with a mean distance covered of 6,201 feet (1.175 miles) that they covered while on defense. The guards, as one might suppose, traveled the greatest distance of all, with a mean distance covered of 7,023 feet (1.429 miles). The guards in this type of defense traveled 1,419 feet farther than the forwards. This was also a greater distance, by 432 feet, between guards and forwards than that which occurred in the zone defense, which goes to show that there is a greater uniformity of distances traversed by players in the zone than there is in the distance covered by the players in the man-for-man defense. The difference in the distance covered traveled by the forwards and the centers in the man-for-man defense was 596 feet less than the forwards had to cover than the centers. The centers in the man-for-man defense traveled 822 feet less on the defense than the guards in the zone defense.

Of the twenty-three games in this study employing the zone defense three used the two-one-two defense, six used the three-two zone defense, and fourteen used the two-three zone defense. The players in the two-one-two zone defense traveled the least distance of any of the players in the three types of zone defenses followed in this study. There were only three games followed in which the two-one-two defense was employed so therefore it cannot be said with any degree of reliability that the two-one-two zone defense is the most economical from the standpoint of distance traversed. The mean distance traveled by the players in the two-one-two zone defense was 5,220 feet. The forward, in the one game followed, traveled a distance of 4,607 feet, which was the least distance traversed by any player in the zone type of defense. The center in the two-one-two zone defense traveled 5,004 feet on defense, while the guard traveled 6,048 feet. In every case (three only) the players in the two-one-two defense traveled the least distance of any of the players in their respective positions. Not enough games were followed in which the two-one-two zone defense was used to make these figures significant, but it does seem to indicate that there might be a tendency for the players in the two-one-two defense to travel less than the players in the other types of defenses. Further work along this line will have to be done before any definite conclusions can be reached.

The two-three zone defense traversed a mean distance of 6,067 feet. The forwards in this type of defense covered a mean distance of 4,945 feet which was only 336 feet more than the forwards in the two-one-two zone defense. The center in this type of defense seemed to travel the greatest distance, as he traveled the mean distance of 6,556 feet. This is 1,413 feet more

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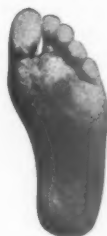
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than the forwards traveled, and 968 feet more than the guards in this same type of defense. The guards traveled a mean distance of 6,388 feet.

The forwards in the three-two zone defense traversed the mean distance of 6,300 feet, and the guards covered the mean distance of 6,584 feet. There were no centers followed who played in this type of defense.

From the few games followed, the indications are that the two-one-two zone defense is the most economical from the standpoint of distance traversed. The two-three zone defense ranks next in line with the least distance traveled, the three-two defense traveling the greatest distance of all the zone defenses.

### Conclusions

The conclusions drawn from this study on the distance traversed by basketball players in the different types of defenses studied are as follows:

1. There is not as much actual difference between the man-for-man defense and the zone defense as is the popular opinion. The mean difference in this study is 394 feet, which is not enough to be concerned about.

2. The forwards in the zone defense traversed the least distance of any of the players on defense, while the guards in the man-for-man defense traversed the greatest distance.

3. The forwards in each type of defense traversed the least distance of the men in the three positions on defense. The centers were next in line, with the guards in each type of defense covering the most distance.

4. Activity did not vary significantly from one quarter of the game to another.

5. There is an indication that the two-one-two type of zone defense is the most economical from the standpoint of distance traversed, with the two-three zone defense ranking next, and the three-two defense bringing up the rear in the distance traversed. The man-for-man defense traveled the greatest distance of any of the different types of defense.

6. From the standpoint of conservation of the player's energy, I would say that the zone defense is the more conserving because it requires fewer stops and starts than does the man-for-man, and I believe it is the starts and stops which make for the difference in the physical strain upon a player.

## Citizenship Values in Athletics

(Continued from page 15)

fectively. Without it there is chaos in any situation. In all our athletic contests we have rules which are followed and are enforced either by appointed officials or by participant officiating. In most cases there is adherence to the fundamental principle that the official is connected with the game to help the participant rather than to hinder him. He is to see that the code is followed. If it is not, the offender is punished by the infliction of the prescribed penalty. Again, it should not take too much imagination to see that there easily could be some "carry-over" values in the way of good citizenship from these lessons in athletics.

Do athletics contribute to preparedness and national defense? Most of the things we do today are performed with the thought of such a question as this lurking somewhere in our minds. One important phase of preparedness is morale. Morale is improved and built up by release from fatigue and a change in activity. Athletics provide these opportunities. One of the important provisions of the present program of the selective service army of the United States is the attention to be given to recreation and competitive athletics. Actually, all athletics are competitive—you either compete against yourself or the other fellow. But army officials want team games as well as recreation opportunities in order that men may be kept in the best possible mental and physical condition.

Probably no greater possibility is afforded for developing loyalty to and pride for, that to which one belongs than athletic competition. From a strictly physical standpoint competitive athletics, properly conducted, have almost unlimited value. An athlete must be in condition or he is soon left by the wayside. This value in athletic competition is not to be overlooked in the light of preparedness and national defense.

Rules, regulations, policies and programs are valueless unless the individuals affected by them are made better by the experiences they have had. The values of some of the "carry-over" activities in education may be debatable, but who can question the value of knowing the rules of a game, playing fair, hard, and clean, and being a good sportsman? We have definite ways of observing whether or not our athletics are paying dividends in good sportsmanship and better citizenship. This concluding analysis of "Athletics" would apply equally well to our analysis of "Citizenship";

The "A" in athletics stands for ambition—ambition to be the best possible player in one's position on the team.

The "T" in athletics stands for training—the first requisite of any athlete.

The "H" in athletics stands for honesty—honesty to one's self and one's team mates.



- The "L" in athletics stands for loyalty—loyalty to team and to school.
- The "E" in athletics stands for eligibility—without which an athlete is valueless to his team.
- The "T" in athletics stands for trustworthiness—a trait all good athletes possess.
- The "I" in athletics stands for improvement—which is always observable in good athletes.
- The "C" in athletics stands for courage—courage to do the thing that is right regardless of how the game is going.
- The "S" in athletics stands for stick-to-it-iveness—the best trait in any athlete.

## The Mechanics of Officiating in Basketball

(Continued from page 14)

official signals a substitute to enter the court. The time-out watch should then be started (assistant timer). If a substitution or substitutions take more than thirty seconds, a time-out must be charged against the offending team.

6. A substitute who enters the game may not be removed nor may a removed player reenter until the play has been resumed. The scorers and officials must both check this possibility.

\*(Technique developed by Professor T. L. Gibbings, Director of Intramural Athletics, University of Arizona.)

### Timing

Basketball games are often won or lost in the last five seconds of play. Consequently, timing should be done carefully and effectively. Officials and timers should have a clear understanding regarding procedure and signals.

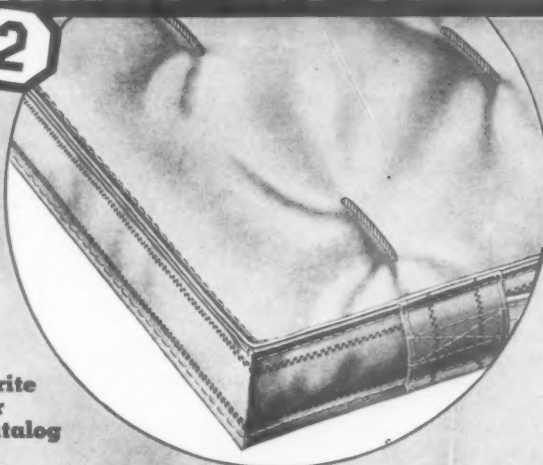
1. At the beginning of each half, playing time begins at the instant the official blows his whistle as the ball leaves his hands on the toss.

2. During the game, playing time ceases when the official whistles the ball dead and indicates a foul; when an official suspends play for a substitution upon signal from the scorers; when time-out is ordered by an official to obtain the ball which has rolled under the seats or lodged in the supports of the basket or when it is necessary to disentangle the net of the basket; when a player's request for time-out is granted, the ball being dead or in possession of the player's team; when an official suspends play because of injury to a player or for the removal of a disqualified player. Both officials and timers must clearly understand the signals for time-out.

3. On a single free throw or the last throw of a multiple throw which is missed,

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times goes in when it is evident that the ball will go into play by a rebound.

4. If the single free throw or last throw of the multiple throw results in a goal, time goes in when the ball is played from out of bounds and crosses the plane of the boundary line. The referee should indicate this by a chopping motion of his hands.

5. If time-out is called when the ball is out of bounds, time goes in when the referee signals with a chopping motion of his hand that the ball has crossed the plane of the boundary line.

6. If times goes in with a jump ball, proceed as in No. 1.

7. Timers and officials should be especially alert at the end of each quarter or half. If a foul is committed or a goal is made before time is up, the foul shall be penalized or the goal made shall count. If timers agree that time was up before the goal was made or the foul was committed, the goal shall not count and the foul shall not be penalized unless the foul is flagrant. In case the timers disagree, and the referee has no other knowledge of what actually happened, the goal shall count or the foul shall be penalized.

8. If the ball is in the air at the close of the first or the third quarter and the goal is made, start play with a play from out of bounds by the team scored on. If the goal is missed, start the quarter by a jump ball at the nearer free-throw line. If the quarter ends with the ball in possession of either team, the play begins with a play from out of bounds. If the quarter ends with a foul or violation, begin the next quarter with the administration of the penalty.

9. If a team is throwing for a goal and the dead-ball signal, including the end of the quarter or half, is sounded while the ball is in the air, the goal, if made, shall not count if a player of that team committed a foul or violation before the ball was thrown.

10. Scorers must keep a record of the time-outs charged to each team and notify the referee when a team has had five charged time-outs. The referee should notify both the team and the coach that it has had five time-outs. Additional charged time-outs are penalized as technical fouls.

11. A team shall be charged with a time-out when the play is suspended at the request of any player. It shall not be charged with a time-out if an injured player is removed within one minute and a substitution is completed within thirty seconds. A requested time-out is not charged as a time-out if a substitution is completed and play resumed within thirty seconds unless such time-out is not in the interval following a field goal. (See second question, page 20.)

12. Note whether or not either team (high school) has had a time-out during the first four minutes of either the second or the fourth quarter. If not, the timers

should notify the officials of this fact as soon thereafter as the ball is dead and the officials time-out of two minutes shall be taken. However, this regulation may be waived on request of both coaches.

13. If the game ends in a tie, the officials should require teams to stay on the court. Grant an intermission of two minutes. The teams will not change baskets.

14. The first overtime period shall continue three minutes in high school—five in college. It begins with a jump ball at center. If one team has scored more points than the other by the end of this period, the game is over. If the score is a tie, grant an intermission of two minutes during which the teams must stay on the court.

15. The second overtime period shall continue until one team scores two points. It begins with a jump ball at center. If a team has scored one point and the other team no points during this period, the first team wins. If each team has scored one point, it is a tie game. Grant another intermission of two minutes.

16. The third overtime period shall be conducted in the same manner as the second overtime period.

#### Post-Game Activities

All officials connected with the game should bear in mind that their official connection ends when the game is over.

1. The referee should check the score book to see that the record is accurate and complete.

2. Take the game ball and turn it over to the home team management (referee).

3. Other equipment (watches, score books, and horns) should be turned over to the proper authorities (scorers and timers).

4. Inquiries concerning the official game record should be cared for by the scorers.

5. Officials and others connected with the game should neither seek nor avoid the coaches and team supporters.

## The Style of Play Used in Winning the 1940 Indiana High School State Basketball Tournament

(Continued from page 13)

action gives X2 a choice of passing to X4 or to X3.

The starting signal for this play was determined by the direction in which X2 turned to start his dribble. If X2 turned toward X3, that was the signal for X3 to set the screen on X2's guard. If X2 turned toward X1, X1 then set up the screen and the maneuver worked to the opposite side of the floor.

The timing of the play is very impor-

tant. X4 comes out of his position as X2 comes around the corner. As X4 receives the pass from X2, X1 must have set his screen on X5 and X5 is driving in hard as X4 receives the pass. X4's pass to X5 must be well placed. It is a fairly fast pass, leading X5 at proper distance.

#### How We Beat the Zone Defense

Here in Indiana we seldom run into a team that employs a strictly zone type of defense. Due to this fact, I have to admit that, when we do meet one, we have our hands full. The zone defense is very effective against a team that relies solely on screen or block plays as their type of offense. I have often thought that I would like to use the zone, here in Indiana, where a great majority of the teams use screens.

When we encountered the zone defense, which we did in two of our tournament games, I moved three offensive men in under the basket and had them keep moving in and out and around their guards until finally we screened a man loose under the basket. Along with this, we kept moving the ball around the outside corners until the screen appeared. My three front men were 6 feet, 3 inches; 6 feet, ½ inch; 6 feet, 2 inches in height, so that gave us a great advantage. We used an arched pass over the heads of our guards and with this height, we could score.

The most effective method that I have found against the zone defense was to have one or two back men who could score from out on the court. We had such a man in one boy who was the feeder. If the defense dropped into a tight zone around our big men, he pulled up and shot from out of the zone and his shots were usually effective in pulling the defense out of the zone.

When we knew in advance that a team employed the zone, we aimed to build up an early lead in the game and then handled the ball until the guards pulled out of the zone.

## Offensive Play in the All-Stars Globe Trotters Basketball Game

(Continued from page 9)

Illustration 21—Forward 3 has just received the ball from guard 5 and is driving across on a hard dribble, trying to force the defense back.

Illustration 22—Forward 3 is about to pass to guard 4 who is breaking around in front of forward 3.

Illustration 23—Guard 4 is getting set for a shot. The center 2 is about to turn and follow up the shot.

Illustration 24—Guard 4 has just released the ball and the center 2 is striving hard to get a position to follow up the shot.

The offense of both teams clicked well throughout the game and the score was

close all the way, being tied at the half, third quarter and at the end of the game. This made an overtime period necessary, the All-Stars finally winning by two points on Szukala's basket on the guard-around play.

The man-for-man defense was used by both teams shifting only on screens. Due to the fact that the Globe Trotters had three men out, the All-Stars' defense at times looked very much like a 3-2 zone, although it really was a shifting man-for-man.

## Downhill Ski-Racing as Developed In the United States

(Continued from page 11)

used in the summer to get supplies up to the hotel was three miles long and narrow. Although the first races were won in times around twelve minutes, in just four years that time was narrowed down to eight minutes. The racers used poor equipment, knew little about controlled downhill skiing, and in general, most of the skiers participated for the thrill of skiing down hill rather than for the actual competition.

By 1930 downhill racing had made some progress, but it still lacked the leadership necessary to guide that promising sport towards a definite goal. At this point Dartmouth was fortunate in obtaining Otto Schneibs, who was destined to lead the Dartmouth skiers to far greater heights in the skiing world. Otto not only had the ability to organize skiing at Dartmouth and to teach a definite technique, but he instilled in the skiers the spirit of the sport which gave them the incentive to rise to greater accomplishments. This spirit of skiing born at Dartmouth was picked up by recreational skiers as well, and within two years hundreds of students bought skis and went out on the golf course slopes to learn *how* from Otto.

The real climax to both Dartmouth skiing and to Eastern skiing came in 1933 with the arrival of Dick Durrance in this country. Although Dick was born and reared in Florida he had spent six years in the small village of Garmish, high in the German Alps. In spite of the fact that he had started from scratch, during those six years he worked hard with his skiing and emerged a champion downhill and slalom racer. The first appearance of Durrance on skis amazed Eastern skiers. His wonderful technique and control at high speeds immediately set new, higher standards for American skiers. Not content to stand by and watch this unbelievable Durrance, skiers began to copy his technique and by watching him learned how to race down winding wooded trails. By 1936 skiers were graduating into the experts division.

There were so many racers that a classi-

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fication committee was set up to work out a plan for a division of the experts, intermediates and novices. There was a two-fold reason for this innovation; it was dangerous for the novice to race on the expert trails and clubs sponsoring meets were unable to handle the large field of entries. As a result, both the skiers and the trails became classified, which was all for the good of the sport. This classification was handled by the Eastern Ski Association, an association of long standing, affiliated with the National Ski Association. Today this association is a large organization guiding the destinies of all phases of skiing here in the East.

From the few downhill races that existed back in 1930 sprang a whole calendar of such events. For the last several years a racer has had his choice of races for a particular week-end. Races are sponsored by ski clubs, and the race is held either in connection with a carnival, an invitational race, or a state or divisional championship.

### *The East*

Let us look first at New England and its various downhill and slalom courses. Woodstock, Vermont, in spite of the fact it does not have a standard length downhill course possesses the finest slalom hill in the country. The huge open and wooded slope, known as Suicide Six is the scene of the most important Eastern slaloms held each season. The hill has a vertical drop of over six hundred feet, is very steep and is completely covered with bumps, making it a severe test for the expert skier. This hill is so difficult that the average skier is warned to keep off. The wooded trails are most difficult although they lack length. They are used for training purposes and for interscholastic races. There is a rope tow the full length of the hill that skiers use to reach the hill top. Woodstock with its numerous open slopes and rope tows is one of the most popular resorts for Eastern skiers.

The outstanding downhill course in the East is located on Mount Mansfield, likewise in Vermont. This mile and a quarter trail, named the Nose Dive, has much variety with its steep S turns on the upper section, its bumpy straightaways and its many steep pitches. This past summer a chair tow was constructed on Mount Mansfield and this will make possible downhill training for both racers and the skiing public. Although it formerly took at least an hour to climb the trail, this new tow will take the skier up to the top in ten minutes.

New Hampshire's Franconia has the only aerial tramway in North America. Built to accommodate both summer visitors and winter skiers, this tramway has proved a real success. From the mountain top one has the choice of several trails, ranging from expert down to novice. The class-A

races are held on the Taft Trail, a fast, hazardous course, but compared to the Nose Dive, lacking in variety. Weekly time trials are held for skiers and the interest shown by all classes of skiers proves that we are really becoming racing-minded. After all, a sport never reaches its peak until its public starts to participate.

Mount Washington has become a most popular spot for Eastern spring skiing. An abundant snow fall extends the season to June in Tuckerman's Ravine. Week-ends during those spring months hundreds of skiers from all over the East go up to Mount Washington to ski under the warm spring sun. Tuckerman's Ravine, located high on the ragged slopes of the mountain, is annually the scene of numerous spring slalom races, and once each April a downhill race is held, weather permitting, from the top of Washington over the Ravine headwall to the valley far below. The whole upper half of this race course is above tree line and it is the only Eastern course that has open terrain for downhill. The course, three times as long as even the Nose Dive, is a test for the condition of the skier's legs and the person who has not properly trained just cannot control his skis the whole distance, thus losing valuable time with every fall.

### *The West*

In the West, racing is comparatively new. People have been skiing for years but only during the past five years has there been evidenced a desire by the Westerners to learn racing. They have had two big problems that have handicapped their progress. The various skiing spots throughout the West have been isolated, which meant that skiers had to remain in their own back yards and learn to ski without the co-operation of other skiers, and skiing was limited to week-ends.

In 1936, the Sun Valley resort was built by the Union Pacific Railroad. Sun Valley was the answer to the problem that faced the Westerners, for this resort with all its facilities became the center for Western racing and training. It meant that skiers from Denver, Salt Lake City, California, Portland and Seattle could meet at Sun Valley and compete over some of the finest downhill courses in the world. Mr. Averill Harriman, chairman of the Union Pacific board, immediately foresaw that both Western and Eastern racers should be brought together to raise more hurriedly the standards of United States ski racing. Mr. Harriman organized the Sun Valley Open Harriman Cup Race and invited leading competitors from all sections of the country to race at Sun Valley. He personally paid the expenses of the leading skiers and thus brought together the best field of skiers ever to compete in this country. The races at Sun Valley have become a great success.

Sun Valley has many race courses, some

on the open slopes and a few cut down wooded mountain sides. The championship course down Baldy Mountain is a two-mile trail through the woods with a vertical drop of three thousand feet. This course, is longer, faster and more deceptive than our Eastern trails and is rated by authorities as one of the finest tests of downhill racing in the world. The course record of slightly under three minutes is held by Durrance who, with that amazing time, retired the Harriman Cup. This feat labelled Durrance as one of the two or three best racers in the world.

The 1941 National Championships have been awarded to Aspen, Colorado, near Denver. Denver is extremely ski-minded and has produced several of the country's finest racers, so it well deserves the championship races this winter. The downhill will be held on Roche Run, a two-mile wooded trail that oddly enough finishes on the main street of the mountain village of Aspen. I, personally, have never skied that course but from all reports, it ranks next to Sun Valley as the most difficult course in the country.

Salt Lake City has some of the best skiing terrain in the West but lack of organization and of interest has held skiing in check. However, Salt Lake City has had the great fortune to obtain Dick Durrance for this coming season. Durrance, who recently turned professional, will direct a ski school. In the next year or two, Salt Lake City should be put on the skiing map, as that region has some excellent down hill and slalom courses which are above the tree line similar to the open terrain found in Switzerland.

### *The Northwest*

In the Northwest, races are held on Mount Hood, Rainier and Baker. The Seattle skiers were the first in the far West to become first-class racers. However, the weather around those lofty peaks has spoiled nearly every race held on those mountains. When fog closes in on those slopes, it is there to stay for several days, and when that happens, the visibility is just about zero, making racing too dangerous. When it is clear, the chances are good it will get warm and make the snow too wet for racing. Mount Hood is flat and does not have the variety for downhill racing. The whole course is above tree line and, without control gates, is straight down the mountain. There is a good slalom course slope at Mount Hood but for some unknown reason few skiers take advantage of it. Mount Rainier's downhill course is much longer and more difficult than Mount Hood. Although the upper half of the course is similar to Mount Hood, the lower section takes the racer down some steep, open drops that require long, difficult turns at tremendous speeds. A good slalom hill is definitely lacking. As yet Mount Rainier has no



tramway of any sort and racers must journey to Sun Valley for serious training.

### The Far West

Down in California, the skier of today has returned to these same Sierras that so many years ago furnished our first downhill races. Racing has progressed fast at Yosemite and Norden where open terrain yields any number of downhill courses. The Yosemite run is not particularly difficult but is most enjoyable.

One important contributing factor for the successful development of racing has been the influence of the Swiss and Austrian racers who came to this country to teach us racing technique. We have readily grasped what they had to offer and are now becoming equally proficient. In the next two years, I am certain that we will surpass those skiers from the Alps and completely Americanize our skiing. Some of Europe's finest men came to this country four years ago and at the time easily defeated us in competition, with the exception of Durrance. Racing results from the last two seasons prove that we have moved way ahead and today our skiers are passing some of those experts.

There is something about the spirit of skiing that mentally grasps one's entire attention once the white flakes cover the ground. Racing is fun. Perhaps it is the thrill of flying down an open slope on a pair of thin skis, with unlimited speed and direction at one's command.

## Speed Skating in a Winter Sports Carnival

(Continued from page 10)

older skaters competing in a younger class; the youngsters are defeated mentally before the start of their race. Short distances are most attractive for those not having racing skates. The following age groups and their distances are suggested for elementary and high-school speed events:

Boys 9 years and under—75 and 110 yards.  
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Girls 12 and 13 years—110 and 220 yards.  
Boys 14 and 15 years—220 and 440 yards.  
Girls 14 and 15 years—110 and 440 yards.  
Boys 16 and 17 years—220 and 880 yards.  
Girls 16 and 17 years—220 and 440 yards.  
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events. A few novel races will create interest in the sport of skating. The monotony of dashes will be broken if there are a few other races in which there is a greater possibility of others winning. For example, (1) Obstacle races where there are four or five obstacles to skate over, around or under, the objects being a table top, volleyball net, street barricade, barrels, et cetera. (2) Chariot races, with two skaters holding hands and holding the ends of a short rope in their outside hands, pulling a third person who holds the loop of the rope. The rider coasts and does not stroke. (3) Miss-and-out race, where the last two skaters on each lap are taken off the track until the pack is eliminated down to first, second and third. There are many others, such as relays of various kinds, that keep the stars from shining too much at the carnival. Long-winded marathon types of skaters enjoy miss-and-out races. The short-winded or the boys and girls with hockey skates will enjoy one-lap races in the novel class. Races for girls should always be kept within the ability of the skaters in the particular school or community. Unless the girls have been training conscientiously, the long distances will be very unpopular. Events over 440 yards put extra strain on the groups under sixteen so should not be used for them. Special races should never be practiced before the meet. Explanation at the starting line is sufficient.

Excitement and thrills in speed skating come at the close of a meet when the relays are run. These may be run by (1) dividing the outstanding skaters into equal teams; (2) by having a relay race for each age group; (3) by mixing girls and boys on each team. Colored sashes or arm bands for marking each team will help avoid confusion on the tag-off. If there are enough outstanding skaters for special relay teams, a special race should be run for that class. Here again the beginner or novice in speed skating must be considered and given a chance to skate in a relay for his own class.

### **Suggestions for Skating Rinks and Tracks**

An oval track of 220 yards has been found to be most desirable. Flag markers every 25 or 30 feet around the track not only mark the course but add efficiency and color to the occasion. Pennants and flags on strings or wire strung across the rink will add to the spirit of festivity. Wooden block markers with holes in the center for flags are better for marking the course than flags set directly into the ice. Either orange or blue flags are suggested if the school colors are not used to mark the course. Cold water paint applied very thinly will identify the starting and finish lines. These lines should be put on the night before and a thin layer of water frozen over them to preserve the lines

throughout the races. Wooden platforms or wide boards at one side of the starting and finish lines for officials will aid them in enduring the cold until the last race is run. Emblem or letters painted in school colors in the center of the rink and covered with a thin layer of ice will create added interest. In case of a snow prior to the carnival, the snow should be banked around a 220-yard track. This is a splendid way to help control skaters. The space inside the oval gives a place for hockey games, figure skating and pleasure skating after the events are over. Fires in salamanders loaded with coke placed about the outside of the rink will help keep skaters out of the warming house and speed up the running of events. If all races are announced by an amplifying system handled by a clever announcer the interest of the crowd can be kept for the duration of the meet. Whistles are not practicable for starting skating races. A .22 or .32 caliber starting gun is more satisfactory. Before the races start, a parade of the participants skating around the track carrying torches, preceded by a drum corps and colors will lend to the spirit of a winter sports carnival.

The success of any skating meet is made possible by the co-operation of plenty of good officials on the job until the last race is over. A well-planned, smoothly running carnival creates a feeling of satisfaction in the minds of all who participated in its events and promotion.

## **Present Status and Growth of College and High School Hockey**

*(Continued from page 10)*

by the popularity of our modern football game. In sections of the country where artificial rinks provide plenty of time for the practicing and playing of games, high school and college hockey has rapidly become the favorite winter sport. In Boston the Gardens and Arena allow many of the teams to practice throughout the day. On Saturdays the entire day is turned over exclusively to high school hockey. Within the past few years no less than five leagues have been formed comprising a total of more than fifty high schools. Outside of Boston, many other such leagues have been organized. Providence, Springfield, New Haven, Lewiston, New York City, Atlantic City, Eveleth, Hibbing, Duluth, Minneapolis and Pittsburgh sponsor high school leagues. In other cities, such as Buffalo, Philadelphia, Syracuse and St. Louis, officials are drawing up plans to take care of high school leagues.

Recently the high schools in Cleveland and Detroit dropped hockey from the ath-

letic program. The reason for dropping the sport was not because the sport was unpopular but because the local rinks would not grant adequate time for the practice periods and too high rental fees for the use of the ice were charged to justify the continuance of the sport.

During the past few years numerous colleges have added ice hockey to their athletic programs. Baldwin Wallace, Pittsburgh, Western Reserve, Duquesne, Creighton, Colorado College and North Dakota are a few of the institutions of higher learning that are supporting hockey in its infancy stage. Other such colleges as Wisconsin, Northwestern, Ohio State, Chicago and Marquette are anxious to start the sport, provided adequate facilities can be obtained. In the near future many other universities will take up the sport and when this day arrives, hockey will be as great a winter sport as are basketball and wrestling.

Our youths in the United States are natural athletes and if they are privileged to be brought up with the game, they will become excellent performers. It is in the grade schools and high schools that our boys should start learning the essentials of the game. After they have finished their high school careers, these boys will be ready for faster and better competition, namely, college and professional hockey.

Each year American hockey players are more and more winning their way into the major ranks of hockey. These players who win such distinctions are boys who have played on organized high school and college teams, where such rinks have been available for the playing and practicing of ice hockey. Ice rink managers should recognize this fact and should permit the schools to use their rinks as long as time permits. The American public is, after all, interested in watching the American hockey player perform rather than a team that has imported athletes.

## **Suggestions for a Community Winter Carnival**

*(Continued from page 11)*

paper; a vote may be given with each purchase of merchandise at all the stores or with tickets for school activities. If the merchants can be interested in a plan for merchandise votes, they are usually willing to contribute toward the prizes and incidental expenses of the carnival. The runners-up may be a part of the queen's court and thus they are not entirely without honor.

The crowning of the queen may be the culminating activity of the carnival and may be the high spot of a social function held indoors, or, perhaps more in keeping with the winter carnival idea, the queen may be crowned on a throne of ice or snow,

more of which will be mentioned later.

### Contests

Contests of many varieties for young and old, expert and novice should be provided. There are other articles in this magazine dealing with skiing and skating contests so no time will be spent on these subjects. A variety of contests in all of these sports should be provided. For humor and novelty, a three-legged ski race, where the feet of two persons are attached to one ski, may be added. Another novelty is a baseball game played on ice.

One of the most interesting and humorous events is the dog race. One northern city builds their whole Washington's birthday winter program around the dog race. Any dog that will pull a sled may be entered. He may or may not pull the rider. The most fun results when no restrictions are placed except that the boy must not go ahead of the dog or have any leash on him. This type of race invariably ends up in a dog fight with the boys frantically attempting to untangle their dogs while some patient little plodder, barely able to pull the sled, wins the race.

A mound of snow about ten feet high and in the shape of an Eskimo house may be provided for the King-of-the-Mountain game. In this game the object is for the boy to remain on top of the mound or to pull the person off who is already there. The winner is the boy who is there when time is called or the winner may be the boy who remains on top the longest in the opinion of the judges.

Ingenuity and local custom may undoubtedly provide many other activities. An old timers' snow-shoe race is always interesting.

A prize may be given for the most colorful winter sports costume seen during the carnival.

### Snow and Ice Sculpture

To get the real spirit of winter in a carnival requires some community activity in winter decoration. It is surprising what ingenious creations come into being when snow men and ice houses, thrones and palaces are built as community projects. If an ice throne or palace is built, it should be under the supervision of some one who understands construction so that it will not collapse and cause injury to anyone. Nothing is more beautiful than an ice palace at night, illuminated with colored lights. This makes an ideal place for the coronation ceremony if it is not held inside. The festival may be concluded with a winter sports ball or party where all wear their outing clothes.

Some ideas have been presented here that may be followed as described but, perhaps you are already thinking of something you can do in your school or community that is even better.

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